

Athletic Journal

VOL. 58
JUNE, 1978
NO. 10

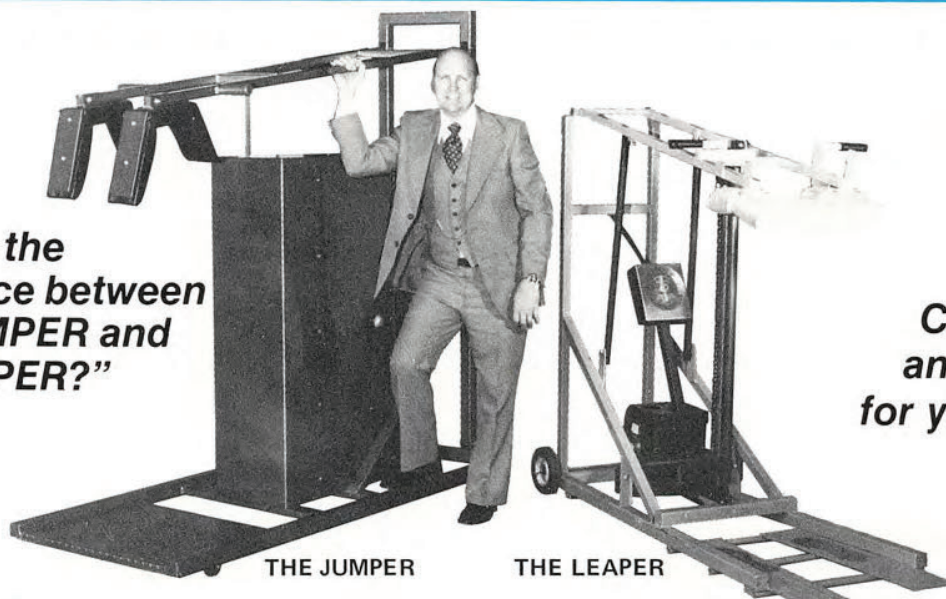


***Effective Sprint-Out
Pass Protection***

LOOK BEFORE YOU LEAP!

"What is the difference between THE JUMPER and the LEAPER?"

Compare and judge for yourself!



THE JUMPER

THE LEAPER

THE JUMPER

1. **Isokinetic Generator**
 - A. Air absorption system.
 - B. In one housing.
2. **Isokinetic Function**
Creating of air resistance by high volume fan system.
3. **Isokinetic Range**
 - A. Instantaneous resistance.
 - B. Full positive drive eliminates jarring and popping of machine by the athlete.
4. **Speed**
 - A. Selector for 5 accurate speeds.
 - B. Instant and easy speed selection.
 - C. Increases in speed through a range, adjusting to the athlete's reaction.
5. **Shoulder pads**
 - A. Controls scapula and helps to position and guide the athlete.
 - B. Keeps lower back in proper position.
 - C. No pressure on back of neck.
6. **Heat**
No heat!
7. **Bearings**
All sealed bearings. No oiling.
8. **Foot base**
Full solid platform
9. **Measurement**
 - A. Tachometer
 - B. Cannot pop needle - constant up to 2% accuracy.
10. **Moving parts**
All are enclosed for safety.
11. **Weight**
Approx. 325 lbs.
12. **"Built and designed for maximum durability, performance and safety of the athlete."**
13. **Noise factor**
Low noise factor with the Jumper
14. **Warranty**
2 years

THE LEAPER

1. **Isokinetic Generator**
 - A. Friction brakes
 - B. Composed of several moving parts.
2. **Isokinetic Function**
Spinning lead weights which compress wall board material.
3. **Isokinetic Range**
 - A. Lag time (slack) before paws catch and brake activates.
 - B. Slack causes jarring and allows athlete to pop machine - giving inaccurate readings.
4. **Speed**
 - A. No accurate speed selector.
 - B. Speed is determined by twisting knob to adjust tension on brakes.
 - C. Static speed throughout range of movement.
5. **Shoulder pads**
 - A. Offers no scapula control - no guidance for body position.
 - B. Offers no assistance to keep lower back in position.
 - C. Pressure on back of neck.
6. **Heat**
Extensive heat! (Heat so severe with prolonged usage that Coach cannot grip fly wheel to twist speed knob. Brake pads will smoke at times.)
7. **Bearings**
No sealed bearings. Constant oiling to prevent locking up of unit.
8. **Foot base**
Partial platform.
9. **Measurement**
 - A. Springs
 - B. Needle easily popped - varies greatly from one machine to the next.
10. **Moving parts**
Some are exposed.
11. **Weight**
Approx. 232 lbs.
12. **No published statement.**
13. **Noise factor**
Excessive noise a characteristic of the Leaper.
14. **Warranty**
2 years

DECALS

Sportdecals P.O. Box 358 Crystal Lake, Illinois 60014

Tough vinyl decals . . . for football, baseball, hockey, lacrosse helmets . . . any hard surface. Order stock award decals from selection below . . . or send coupon for catalog of helmet decals, custom award decals, booster decals, bumper stickers and fund raising ideas.

4¢

3/4"

Available any one color on clear background. Printed 25 per sheet. Minimum order 1 sheet. All decals pictured exact size.



DEATH
D101



DEATH
D102



EAGLE E116



FOOTBALL
F501



HATCHET
H101



HATTRICK H150



HEADHUNTER
H201



HOCKEY
H250



HORSESHOE POW
H704



101%
O-501



PAW
P301



PIN
P401



POW
P701



PRIDE
P801



SKULL
S401



STAR
S601



TALON
T101

10¢

1 1/2"

Any decal pictured above (twice as large) except hattrick, hockey, pin.

7¢

1 1/2"

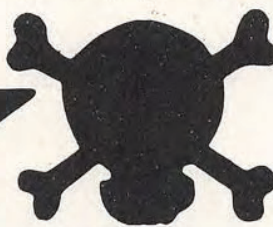
Die cut decals. No minimum order. Available only in air force blue, black, green, navy, old gold, red, silver, white, yellow. All decals pictured exact size.



FOOTBALL
F502



STAR
S602



SKULL
S402

2¢

1/2"

Any decal pictured above (2/3 as large) except D101, D102, hattrick, headhunter, hockey, pin.

USE THIS ORDER BLANK — — WE SHIP NEXT DAY — —

NAME _____ TITLE _____
SCHOOL _____ ADDRESS _____
CITY _____ STATE _____ ZIP _____
TEAMNICKNAME _____ TEL NO. _____

- ☐ check enclosed (save postage and handling) ☐ send complete catalog
☐ bill me at the above address (add postage and \$1 handling to the total)
☐ bill my VISA/BANK AMERICARD or MASTER CHARGE (save postage and handling)

card number _____
expiration date _____

MAIL TO: Sportdecals
P.O. Box 358
Crystal Lake, Illinois 60014

VISA®



WE ACCEPT VISA/BANKAMERICARD AND MASTER CHARGE

ITEM	QUANTITY	COLOR	SIZE	PRICE	TOTAL

Illinois residents add 5% sales tax

TOTAL _____

FOR FASTER SERVICE — TELEPHONE (815) 455-0431

Athletic Journal

VOL. 58
NO. 10
JUNE, 1978



ON THE COVER

Action from last fall's game between two strong Illinois high schools, Gordon Tech and St. Laurence. Keith Rowe rolls out while Jim Grannan affords protection.

Second class postage paid at Evanston, Illinois and at additional mailing office. Published monthly except July and August.
**1719 HOWARD STREET
EVANSTON, ILLINOIS 60202
Phone (312) 328-8545**

Established in 1921 by Major John L. Griffith
Publisher **John L. Griffith**
Editor **Lori Fradin**
Art Editor **J. Cesna**
Art Director **Robert Meyers**
Circulation Mgr. **Katherine Peterson**

Midwest Adv. Representative
D. Robert Inserra
455 Stewart Ave.
Park Ridge, Ill. 60068
Phone (312) 825-4990-4993

Southwestern Adv. Representative
Richard Hoierman
440 Northlake Center — Room 203,
Dallas, Texas 75238
Phone (214) 341-4774

Western Adv. Representative
Bill Hague
Media Sales Associates
12121 Wilshire Blvd., Room 207
Los Angeles, CA 90024
Phone (213) 826-8341
All other advertising communications and mechanical materials should be directed to the publication office — 1719 Howard St., Evanston, Illinois 60202.

Subscription Prices:
One year \$6.00; two years \$11.00; three years \$15.00. Canadian rate one year \$7.50; two years \$13.00; three years \$19.50. Foreign rate one year \$9.00; two years \$14.50; three years \$21.00. Single copies \$1.50 per copy for copies in current volume, \$2.00 per copy for copies in previous volumes.
Copyright 1978 by Athletic Journal Publishing Co.

Change of Address:
Request for change of address must reach us thirty days before the date of issue with which it is to take effect. Duplicate copies cannot be sent to replace those undelivered through failure to send advance notice. Member of the Audit Bureau of Circulations. Address all communications regarding circulation and manuscript to: ATHLETIC JOURNAL PUBL. CO., 1719 HOWARD ST., EVANSTON, IL 60202

ARTICLES:

4 FOOTBALL

- Effective Sprint-Out**
Pass Protection by Mike O'Neill 8
- Pursuit Patterns for**
Split 4 Inside Linebackers by John Durham 20
- ABC Blocking** by Allen Hewins 44
- Multiple Pass Coverages**
From a Four Deep Secondary by Bob Oravitz 52

1 BASKETBALL

- 1977-'78 Basketball Offense** by Nelson Nitchman 34

1 SOCCER

- Winning Soccer Matches**
by Constructive Talking by William Davis 12

1 CROSS-COUNTRY

- Cross-Country Training Systems**
for the All-Around Athlete by Ken Jakalski 14

1 TENNIS

- In Teaching Tennis**
Be Flexible (Part Two) by Chet Murphy 27

FEATURES:

- | | |
|------------------------------------|---------------------------------|
| From Here and There 4 | Game Plan 61 |
| Coaches' Clinic 6 | Coaches' Ready Reference |
| Index to Volume 58 23 | Service Coupon 63 |
| New Items 58 | |

Rubber Handles Better Than Vinyl

(Whether It's Called Composition, Hippohyde, Or Whatever)



So why buy vinyl covered balls when you can get
Mikasa rubber covered balls for the same price?



Choice of 3 Olympics

MIKASA

Exclusive U.S. Distributor, Sports & Leisure International • 711 West 17th Street • Costa Mesa, CA 92627 • (714) 642-5254

FREE BOOKLETS for your tennis players



The Official Rules of Tennis

These abridged tennis rules are intended for use in guiding ordinary play and instruction. Complete rules, with examples and interpretations, are included in A FRIEND AT COURT, and can be obtained from U.S. Tennis Association Publications, 71 University Place, Princeton, N. J. 08540.

What this booklet contains

In this handy 20-page booklet, "The Official Rules of Tennis," which you may obtain simply by completing and mailing the coupon below, we have provided all the information needed for a student or beginner to learn the game.

In addition there is a detailed diagram of a tennis court—showing official dimensions, so that you can check the accuracy of local courts available to you. All tennis terms are defined in clear, simple but official language. You'll also find a complete description of SCORING, INTERFERENCE, TIE-BREAKER PROCEDURES, THE DOUBLES GAME, and much other valuable and useful information.

You may obtain any reasonable quantity of these booklets for your team members or classes by completing and mailing the coupon below.



Ask your tennis supplier
or complete and mail this coupon to:

VICTOR SPORTS, INC.

5115 S. Millard Ave. • Chicago, IL 60632

Please send _____ copies of "The Official Rules of Tennis" to our school, club or organization as specified below.

SEND FOR FREE BOOKLETS TODAY

Your Name _____

(please print)

Title _____

School, Club _____

Address _____

City _____

State _____

Zip _____



here and there

ROCCO CALVO, athletic director and baseball coach at Moravian College, has in addition to baseball, served as head coach in football, where his record was 96-80-8 and in basketball with a 120-87 record. His four-year record as baseball coach is 40-32-2 giving him winning records in three major sports all at the same school. . . For information on the National Strength Coaches Association, contact Boyd Epley of the University of Nebraska. . . As a fund raiser, the University of Nevada—Las Vegas held a Walk-A-Thon/Jog-A-Thon. The event was held on the running track and the participants had one hour to complete as many laps as possible in that time. The funds raised were based on the pledges given on a per lap basis. A similar event at Arizona raised \$250,000. Among the prizes offered were waivers of tuition, trips to Hawaii and the 1980 Olympics. . . From the start of the Southeast Conference in 1933, LSU managed to win 19 of the 31 track titles. Tennessee won its first championship in 1964 and has won every year since and has now chalked up 14 titles. Between the two they have 33 of the 45 SEC championships. . . Gene Mehaffey steps down as basketball coach and athletic director at Carson-Newman College after serving in that capacity for the past eleven years. His head coaching record at the high school and college levels was 402-171. . . The Iowa Football Coaches Association will be hosting its Sixth Annual Football Clinic on August 2, 3, and 4, at the new Sheraton Inn, Cedar Rapids, Iowa.

* * *

IN the fall of 1977 there were only nine football-related fatalities making it the safest year since 1952. This computes out to .53 fatal injuries for every 100,000 participants in organized junior-senior football programs which accounted for eight of the nine fatalities. (The ninth was a college player.) By comparison, 27 youths between the ages of 15 and 19 suffered fatal injuries in automobile accidents between the hours of 3:30 P.M. and 5:00 P.M. during

the August-November football season. . . Jack Ecklund returns to basketball coaching after a year absence while he served as athletic director at Whitworth College. In 26 years of coaching at both high school and college levels, his record is 349 and 230. He will continue to serve as athletic director. . . L.W. Robinson of 308 Larchmont, San Antonio, TX 78209, has a rather complete set of previous volumes of the *Athletic Journal* both bound and unbound that he will sell. . . Bob Kloppenburg, who retires this month as basketball coach at United States International University, only had three losing seasons during the 20 years he coached at the San Diego school. Five times he was selected the NAIA District "Coach of the Year". . . In Connecticut this past season, 331 girls participated on the boys swimming teams in the 28 schools which sponsor the sport. . . The average year of graduation

(Concluded on page 42)

THE ILLINOIS BASKETBALL COACHES ASSOC.

ALL-STAR CLINIC & GAME
July 7 - July 8

Horton Fieldhouse,
Illinois State, Normal, IL.

FEATURING

- DAVE BLISS, Oklahoma
- BOB DONEWALD, III, St.
- DENNIS BRIDGES, II, Wesleyan
- BOB BASARICH, Lockport H.S.
- BOB BOGLE, Nashville, H.S.
- BOB GREGURICH, Havana
- GENE PINGATURE, St. Joseph

Contact

Ron Ferguson, Exec. Sec.
Hassler Hall
Bradley Univ.
Bradley, IL 61625

Your Athletes Will Be Affected by Powernetic Conditioning...

One Way or The Other.



THE D2A POWER KNEE MACHINE



THE POWER RUNNER MACHINE

Powernetic equipment provides Double-Positive Accommodating Resistance for maximum conditioning of athletes in all sports. Thousands of athletes, from junior high to pro, are using powernetic equipment to develop the edge needed to win consistently year after year. If your athletes have ever been beaten by a team that was a little quicker and had a little more snap, you know how powernetic conditioning can affect competition. Your team can develop this effect with Double-Positive Accommodating Resistance and Powernetic equipment from Hydra-Gym.

All our equipment is available in single or modular units that can be added as your budget allows. We have more information regarding all of our equipment and would like for you to call us for brochures and answers to any questions you may have. The choice is yours, one way or the other.

HYDRA-GYM® Athletics, Inc.

2121 INDUSTRIAL ROAD
P.O. BOX 599, BELTON, TEXAS 76513

DIAL TOLL FREE 1-800-433-3111
IN TEXAS, DIAL 1-800-792-3013

All Power and Powernetic equipment is covered
by Pat. Nos. 3,822,599; D-242,732; 4,066,259 and other patents pending.

score with DAKTRONICS

... the first complete line of
100% solid state scoreboards

FOOTBALL/TRACK SCOREBOARDS



MODEL FB/T-15



MODEL FB/T-10



MODEL FB-13



MODEL FB-8

FEATURES:

- Unmatched reliability and accuracy
- Rugged 16 gauge aluminum construction
- Period time to 19:00, race time to 19:59.00
- Scores to 99
- Options and colors available
- Variable day/night dimmer standard
- Use for baseball with optional caption package.

ALSO AVAILABLE:

- wrestling
- basketball
- baseball
- hockey
- swimming
- shot timers

DAKTRONICS, INC.

P.O. Box 299-B Brookings, S.D. 57006
PH. 605-692-6145

Send FREE literature on complete
line of 100% solid state Daktronics
Scoreboards

NAME _____
TITLE _____
SCHOOL _____
ADDRESS _____
CITY _____
STATE _____ ZIP _____
PH. _____

CLIP AND MAIL TODAY!

coaches' clinic

Question: What method of fund raising do you use to augment your gate receipts?

Bruce Glover, Deckerville, Michigan, High School



Our most successful fund-raising endeavor for the athletic program has been a marathon. It is a 7-8 mile course and the students collect pledge money for each mile they run. We divide it into three divisions: 7-8, 9-10, and 11-12 and have separate divisions in each group for boys and girls. We purchase gold, silver and bronze medallions and inscribe on the back of each medal Deckerville Marathon, with the year. We award three places for both boys and girls in each division and, in addition, award two medals in each division for the boys and girls bringing in the most money. The beauty of this method is that the only expenses are the medals and ribbons, and with proper promotion, there is no end to the amount of money that can be derived from it.

Lou Kaczmarek, Franklin, Ohio, High School



All of our activities are funded from gate receipts from football and basketball. Our local board expends money for bus transportation and coaches' salaries; other than that, we receive no financial board help. The athletic department as such has no fund-raising projects. If a head coach of a sport wants to raise extra money for the team, the project must be cleared with the athletic director, principal, and superintendent. All monies earned on the project are turned in to the school secretary, with the project money being earmarked for a special fund. When the project is completed, the coach can draw on this fund by submitting statements to the school secretary who will in turn pay by check, the amount stated. This way there is no athletic department money being expended for frills, and yet the frills may be obtained by the coach and team if they so wish to have them.

Rick Strauss, Medicine Lake, Montana, High School

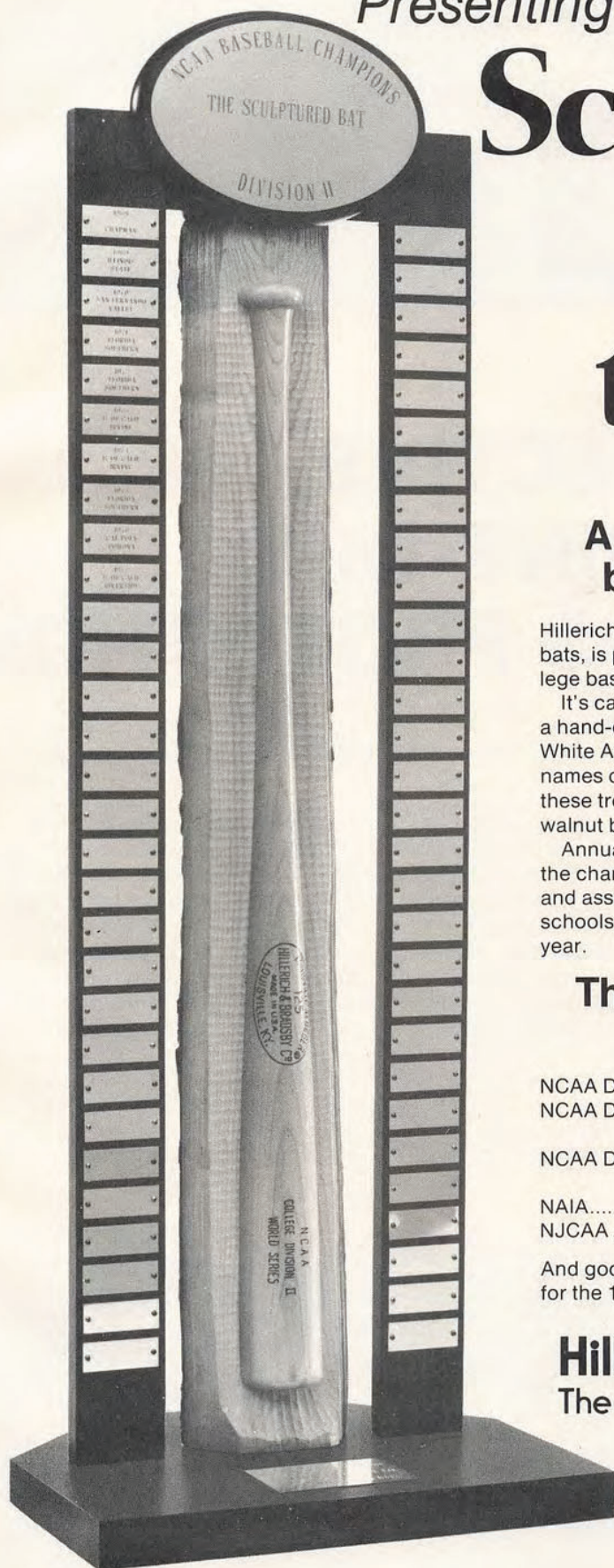


As a small school, gate receipts do not completely support our athletic program. Our school board supplements the gate receipts to make certain our students have the basic equipment needed. To maintain outstanding teams, we need more than just the basic equipment. To provide these extra items (weight machines, attractive facilities, etc.), our Letterwinner's Club raises money; if they come up a little short of their goal, the school board will help out. The Letterwinner's Club's fund-raising projects include selling concessions at basketball tournaments and track meets, Christmas tree sales, intramural programs and more. We operate under a twofold theme: First, we want to provide a service to the people who support our projects. Secondly, we provide them with something they need and/or want at a reasonable price. We never overcharge or try to sell them something they do not need.

Bill Thieben, Beaver Valley High School, Lebanon, Nebraska



We use three basic methods of fund raising: a concession stand, raffles, and a booster club. Other projects we have found profitable are aluminum can and paper recycling, and booster buttons. Future projects include selling pens and pencils, and a paperback book sale. More important than the nature of the project is the attitude toward each project. Each project should be fun — we buy an inexpensive button-making machine, instead of buying the buttons. The entire school system should be involved — anyone can pick up an aluminum can. All projects need advanced advertisement followed by a public relations program. We explain each program, what the fund will be used for, and how close to the goal we are. We show the public we are working for these funds and that for their support, they will receive some reward or service.



Presenting . . . **"The Sculptured Bat" trophy.**

A salute to the college baseball champions.

Hillerich & Bradsby Co., makers of Louisville Slugger® bats, is proud to offer this tribute to the excellence of college baseball play.

It's called "The Sculptured Bat" trophy and it's actually a hand-carved bat rising from an upright split of northern White Ash. Surrounding the bat are brass plates listing the names of all the college national champions. Each of these trophies stands 48 inches high on a "home plate" walnut base.

Annually in June, a "Sculptured Bat" will be awarded to the champions in each of the national college divisions and associations. The trophies will remain with the schools until new champions are crowned the following year.

The 1977 "Sculptured Bat" recipients were:

NCAA Division I	Arizona State University
NCAA Division II	University of California at Riverside
NCAA Division III	California State at Stanislaus
NAIA.....	David Lipscomb College
NJCAA	Yavapai Junior College

And good luck to all the college teams now in the running for the 1978 awards.

Hillerich & Bradsby Co.
The hardest hitting name in sports.
LOUISVILLE, KENTUCKY

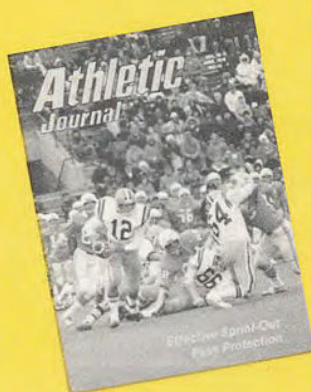


1

2

3

SERIES A



EFFECTIVE SPRINT-OUT PASS PROTECTION

By **MIKE O'NEILL**

Head Football Coach, St. Laurence High School, Burbank, Illinois

DURING the past several seasons the St. Laurence offense has been noted for having a very effective running game from the wishbone triple option. However, we have used our passing game at some crucial points in many ball games, and feel that we must have a sound idea of protecting the passer. Because we are a run-oriented team that requires precision timing in triple option football, we cannot devote much practice time to pass protection. We have a short period of time in which to get our work accomplished, and still

emphasize to the players the importance of protecting the passer. By using sprint-out passing, as opposed to dropback passing, we can maintain our philosophy of aggressive line play. Teaching dropback pass protection would conflict with the basic philosophy of our running attack. We feel that sprint-out protection cuts down on the teaching time and best complements our running game. Our system can be adopted by any sprint action passing game.

Series A shows our pass blocking techniques. Our linemen are given a

number in the huddle which indicates the direction of the quarterback sprint. This indicates front and backside and we can sprint either to the slot side or the tight end side. On the snap, the interior linemen will take a lateral step to the call side and will block an area, not a man. Blocking an area is our philosophy of protection. The lineman's weight is shifted very slightly backwards so that he does not have to adjust his weight with his steps. The first steps are shuffle steps keeping square to the line of scrimmage in a good hitting position.

4

5

6



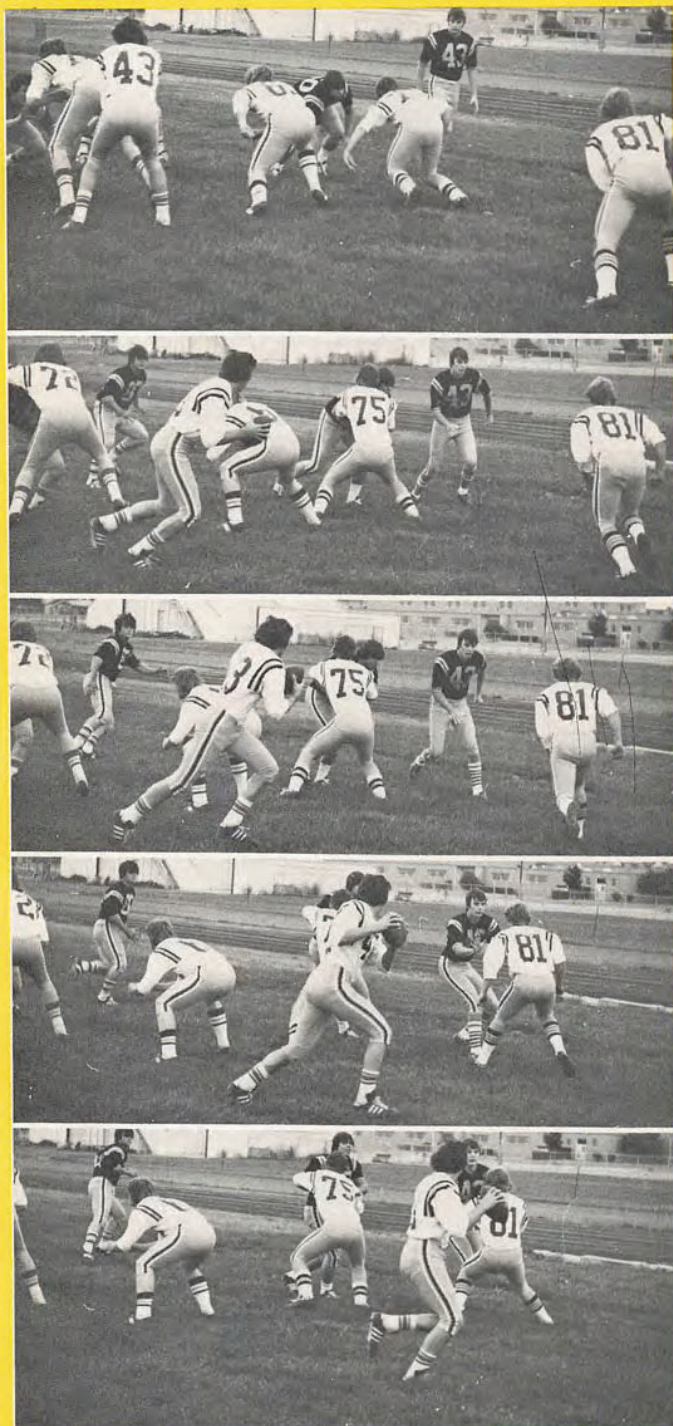
His tail must be down, legs bent at the power-producing angle, head up, elbows in and fists clenched under his chin. It is important that he make good initial contact in the area of the defender's numbers, using his fists to keep the defender's hands from throwing him off-balance. The most important thing in good pass protection, of course, is the footwork. Each blocker must work to stay up on his toes and maintain constant foot movement. When a blocker is

beaten, the reason is usually that his feet have stopped and he has lunged at the defender. After initial contact, using his arms for leverage, the blocker must recoil into the same hitting position. Completing a second pop, if the blocker feels his man is going to beat him, he may use a cut technique. At this point the ball should be thrown or the passer has broken the play.

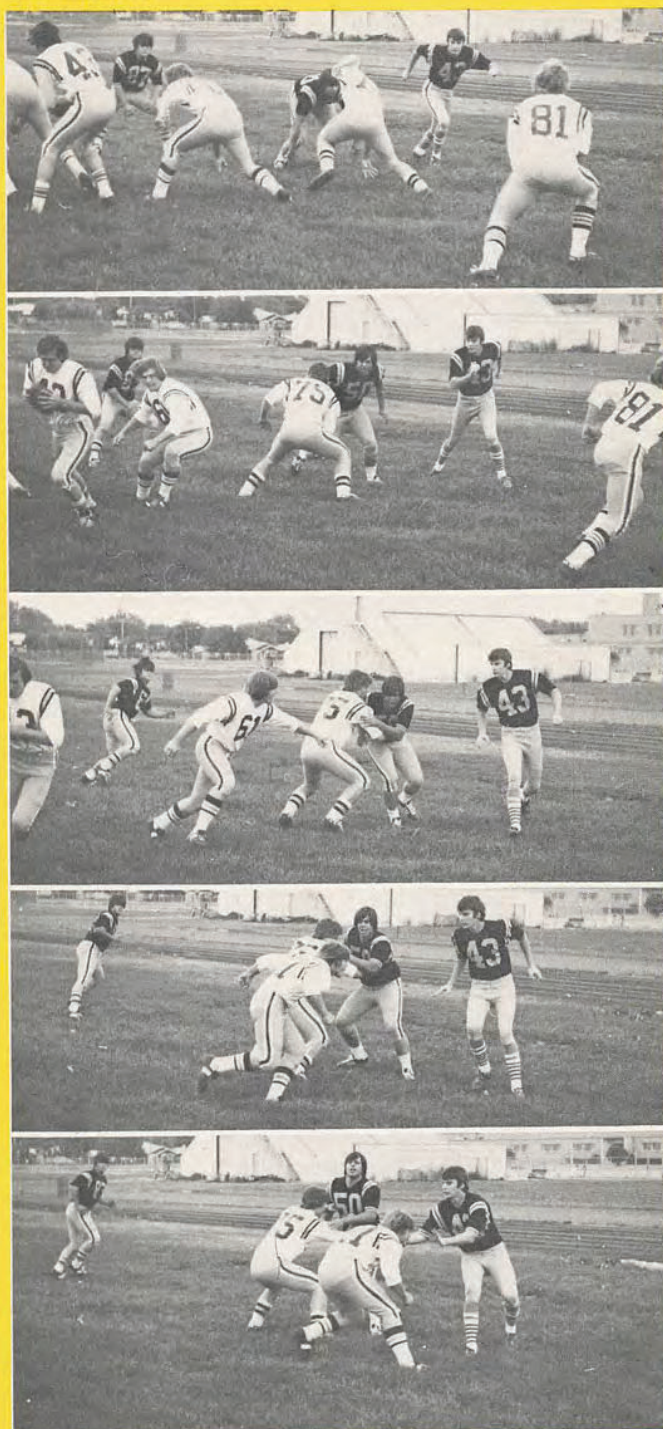
Sprint-out protection must be broken down into frontside and backside pro-

tection. The quarterback will set up just outside our frontside tackle about seven to eight yards deep. Therefore, we cannot allow any penetration on the front side of our protection. It is this part of our protection that must be aggressive. The center, guard and tackle on the call side are aggressive blockers while the backside guard and tackle can be semi-aggressive. Also, our tight end may be used on backside protection if we expect a full rush by the defense. The

SERIES B



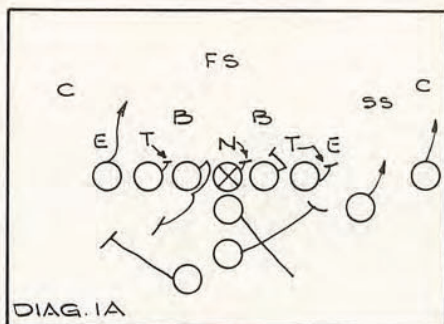
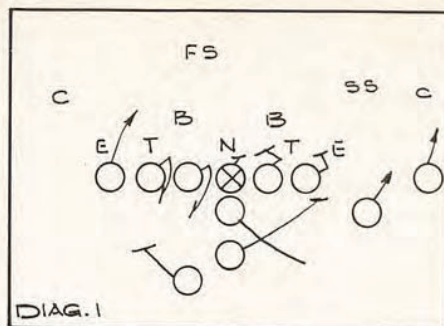
SERIES C



blocking of the backs is extremely important. Regardless of the offensive set used, at least one back must be responsible for the contain rush, usually the defensive end. In the St. Laurence passing attack, we will not attempt to break contain and throw on the run. The frontside back must be aggressive in his block. He must seek out the defender and not wait as he may be in the drop-back situation. He must not plant his feet and wait, but instead must make good contact to stop the charge of the defender. The ball must be released soon after this contact. Cutting the defensive end is also a good technique if used to keep the rush honest. The block of the back should be aggressive, but under control. The backside back may be called to block the backside defensive end, run a swing route or a throwback route.

Series B shows frontside protection. Notice the lateral step of each lineman and his position after his second step. The idea at this point is to guarantee the line of scrimmage. The toughest teaching point in pass protection is probably to coach the players to make good contact and then recoil. Most young linemen have trouble with this phase of pass protection which causes them to lose their blocks, especially when they are accustomed to making drive blocks. Observe the position of the back when he makes contact with the defensive end. The quarterback is setting up just outside the tackle and inside the back's block.

Series C illustrates backside protection. This is the responsibility of the guard, tackle and back, although we can also use our tight end for maximum protection. Notice that the first steps of the guard and tackle are the same as those of the frontside linemen. These backside blockers must take away the quick route to the passer by sealing off the inside first. If the guard is uncovered as would be the case in an odd alignment, he will step onside, then cross step with his other foot facing the center. Now he will gain depth into the backfield and look for the backside defensive end. When the guard is covered, he will force the defender to take the long route to the passer. The backside tackle has probably the toughest single block in sprint pass protection. He must step inside to take away the quick route, then hinge block by dropping his back foot. We believe that this tackle should be almost parallel to the sideline on his second step so that the defender has only the



outside route. Now he can ride the defender deep into the backfield after making contact by keeping his head between the man and the passer. The backside back may be called upon to clean up on the end or take him alone if the guard cannot get backside.

Diagram 1 shows how our sprint protection blocks the Oklahoma defense. We believe that the nose guard must be double team blocked, so our frontside guard will seal him after making his frontside step to check a linebacker stunt or tackle slant. Observe the backside responsibilities as indicated previously.

Angle defense requires a little more reaction by the offensive linemen. Diagram 1A shows how the protection blocks an angle toward the sprint action and Diagram 1B shows how it would be executed away from the action. In both situations one of the guards will help on the nose guard when he slants. In Diagram 1B, the backside guard will take his lateral step and see the angle towards him, so he will square up on the nose guard and get help from the center turning back. The back must then block the backside end by himself. The frontside guard will pick up the slant tackle and the frontside tackle will seal after checking for a linebacker scrape. In Diagram 1A, the frontside tackle has a key block. He must be certain that the loop tackle does not get by him to pressure the passer. We are only concerned with the outside move. If the tackle goes inside, he must be blocked by the guard. The backside tackle must be sure the

slant tackle does not beat him to the inside with his initial move. The frontside guard will check the tackle's move and seal on the nose guard.

Diagram 1C shows the blocking against a split 6 defense. In blocking this front, we are primarily concerned with the extra man in the middle. By taking the proper steps, the linemen can pick up both linebackers on a stunt. The backside tackle will have to get down on the defensive tackle. The frontside tackle must be aware of the scrape from the inside linebackers and should not be overly concerned with the down lineman outside him, as he will be blocked by the frontside back. With eight possible rush men, however, the quarterback must be conscious that one of these cannot be blocked due to the 8:7 ratio of pass rushers to blockers. The tight end can be held in on certain situations or used as a quick receiver on a blitz situation. This will give an 8:8 ratio.

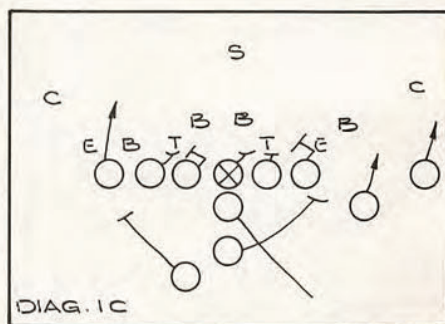
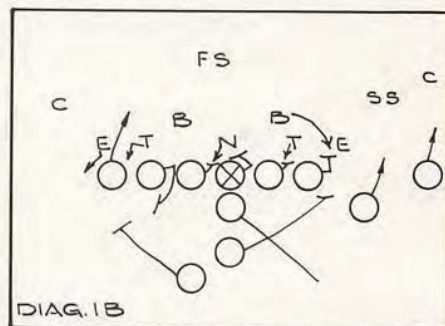
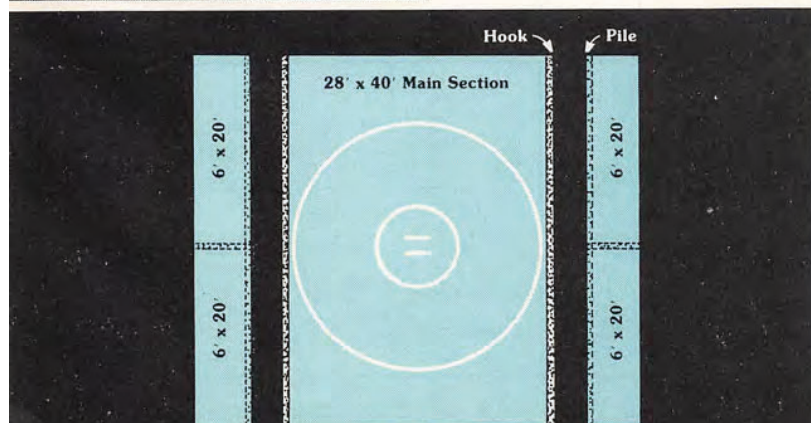
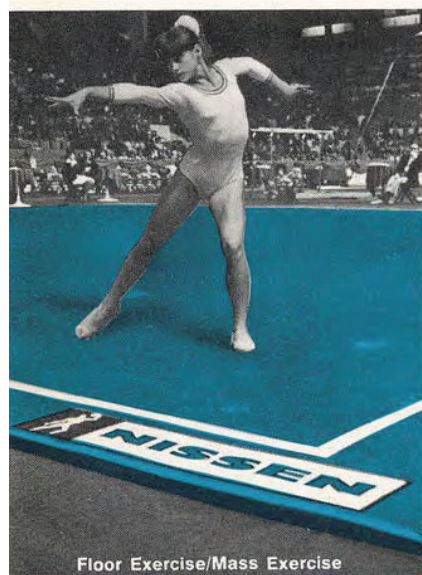
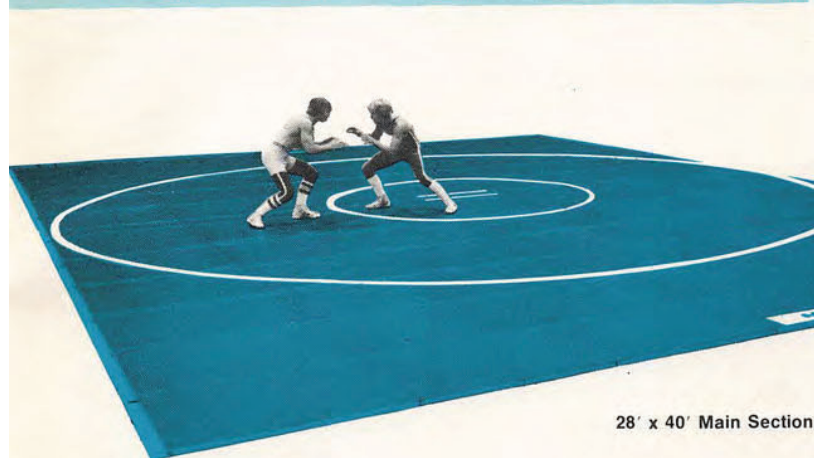
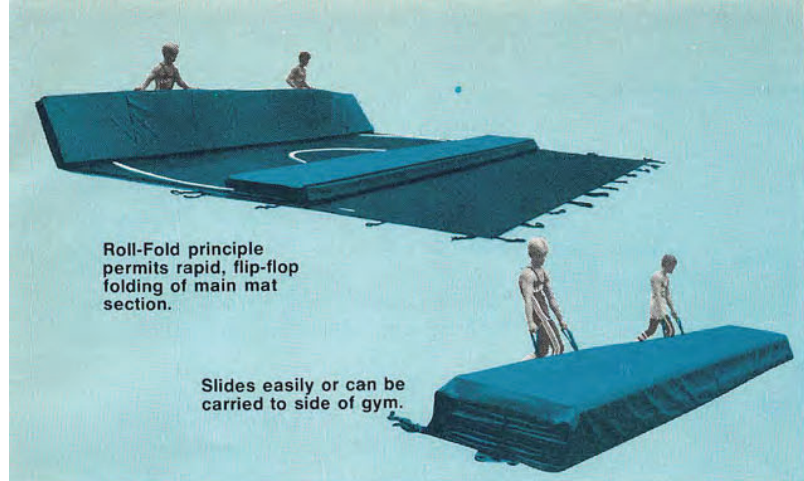


Diagram 1D shows the blocking against an even seven-man front, such as a 4-3. Most teams will not stunt off this against an option team, so our linemen usually end up blocking the man directly over them. Nevertheless, they must still take their proper steps to insure blocking all areas. A cross-charge between down linemen or a *mike* stunt by the middle backer can be picked up if the offensive linemen are dutiful in taking their proper steps.

Diagram 1E shows how we would block a 6-5 goal line look. We are not

(Concluded on page 22)



Special Velcro Hook and Pile fasteners permit close joining of five mat sections into a one-piece 40' x 40' mat.

System Nissen-

The mat you wrestle on-not with!

You don't have to wrestle with budgets because the new Nissen Mat will serve so many different school activities. The official size wrestling area is quickly attached to four 6' x 20' sections that double as Phys-Ed and Gym exercise mats.

You don't have to wrestle a System Nissen Mat to transport it either. Nissen's flip-flop folding system allows two people to fold and store the mat in less than sixty seconds.

Nissen builds in safety, durability, versatility and ease-of-maintenance. We think it's more than a mat. It's an Action Environment.

Can we build one for you?



Call 800-553-7901 Toll Free

- ☐ Yes, I want to receive your 1978 catalog.
- ☐ Please send more information about your new Mat Side Timer/Scoreboard.

Name

School or Organization

Address

City

State Zip

NISSEN
Subsidiary of Walter Kidde & Company, Inc.
KIDDE

Box 1270
Cedar Rapids, Iowa 52406
Phone 319-365-7561

WINNING SOCCER MATCHES BY CONSTRUCTIVE TALKING

By WILLIAM W. DAVIS
Head Soccer Coach
Virginia Wesleyan College,
Norfolk, Virginia

As more and more of our younger players are exposed to the game of soccer both by playing and by watching professional and college teams, they begin to develop skills they observe the older players using — skills which will follow them through their own careers. One such aspect of the game that younger players use without a thorough understanding is talking on the field, or calling a ball while the match is in progress.

Aside from cheering a teammate on after a good move has been made or shouting to stop a player dribbling in on a goal uncontested, the role of field talk is very important in winning a soccer match and gives the team that uses it wisely a real advantage over others. There are as many soccer terms used on the field currently as there are in any sport. A basketball player, for example, knows exactly what to expect when a teammate calls *screen*. However, when a soccer player hears the call *man on*, the meaning may often be unclear. It is important, therefore, for high school and junior high team coaches to pay attention not only to proper physical skills

training, but also to proper strategic training in this regard.

To assist in accomplishing this purpose, some common soccer field terms are defined and possible uses suggested. Note the use of the word *possible* as a qualifier for a coach who may want to invent words or phrases for the team to use. We do not wish to suggest otherwise. The real value or benefit from such phrases lies in their common understanding among team members, their common use by the team, and their actualization on the field during the game.

1. *Hey Joe, I'm open — pass me the ball!*

Perhaps this is the most widely abused use of field talk. To call for a ball when open simply draws attention to the free player and, more than likely, by the time the ball arrives the defense will have picked this player up. Also, the chance of the defense intercepting the ball is greatly increased. If players feel the need to call for a pass when open, it strongly suggests that the coach should work with the team on improving field vision and looking up off the ball. Players must accept the fact that by running to positions on the pitch where they are open helps to spark the offense and distract the defense even if the ball does not arrive every time the player moves in such a manner. This is, in effect, the

heart of unselfish running and team effort.

Once the team has become proficient at *not* calling for the ball and yet seizing opportunities that present themselves with open players, the coach may wish to allow decoy calling — asking for the ball deliberately to draw away the defense with no real intention of receiving it.

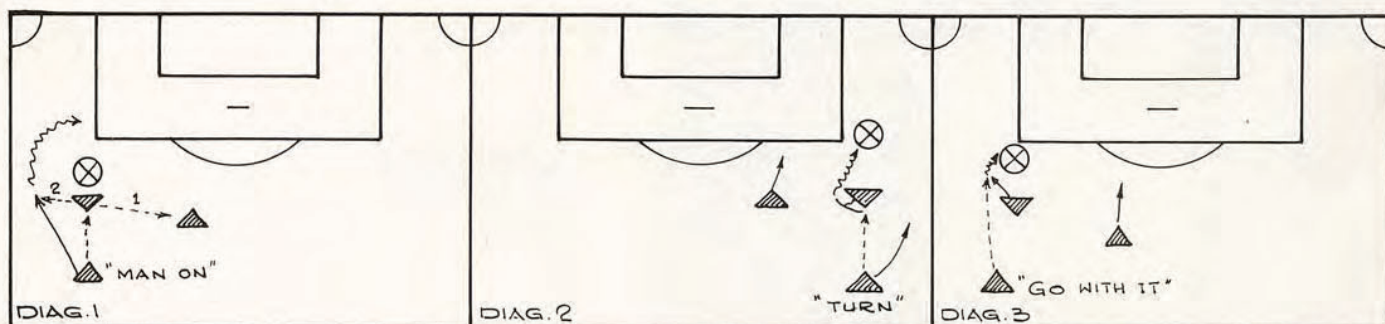
2. *Man On*

The space in front of a player in possession of the ball is dead space; the player should be capable of deciding to meet the defender coming up or to pass the ball on to another without assistance. What happens behind a player's back, however, is another matter. In soccer, what we can't see may and often does hurt us. Many good strikers have been lost to a team when, on dropping back to meet a pass from midfield, they attempt to pivot with the ball and are tackled hard from the blind side by a close marking defender. A forward needs only to have his *clock cleaned* once or twice in such a manner before losing confidence and a vital aspect of the team's offense may be in danger. By using the call *man on*, any player coming to meet a pass with his back to the defense (shielding the ball with the body) knows that an opponent is playing tight player-for-player defense and that it is dangerous to attempt to pivot with the ball. Some coaches insist that the ball be played away first touch by the receiver. Diagram 1 shows the *man on* call, with two possible first touch pass options from the receiver.

3. *Turn*

Again, the player's back is to the defense. This call notifies the receiver that there is time to pivot or turn with the ball without fear of being tackled instantly by a close marking defender. Turning on the ball is a skill in itself and should be practiced regularly. It does involve slowing or stopping the ball and giving it redirection as the offensive player strikes out on a path toward the

(Concluded on page 62)



Nautilus ... for the HIGH SCHOOL

**ATHLETIC CONDITIONING
REHABILITATION
PHYSICAL EDUCATION**

**Progressive Resistance Exercise
for the DEVELOPMENT of**

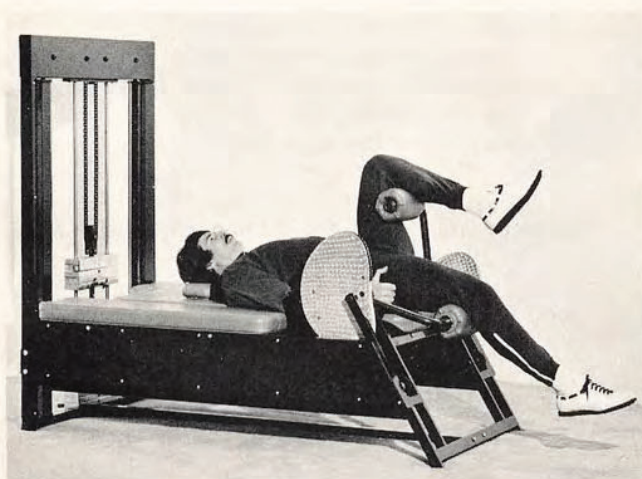
**SPEED
FLEXIBILITY
STRENGTH**



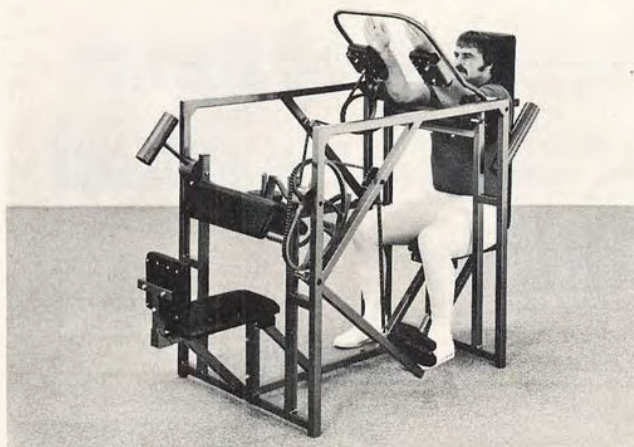
PULLOVER MACHINE (plateloading)



4/WAY NECK MACHINE



DUOsymmetric/POLYcontractile HIP and BACK MACHINE



BICEPS/TRICEPS MACHINE

Nautilus MIDWEST

P.O.Box 19040 Cincinnati, Ohio 45214 Telephone (513) 221-2600, 281-8172



By **KEN JAKALSKI**

Track and Cross-Country Coach,
Aurora Central Catholic High School,
Aurora, Illinois

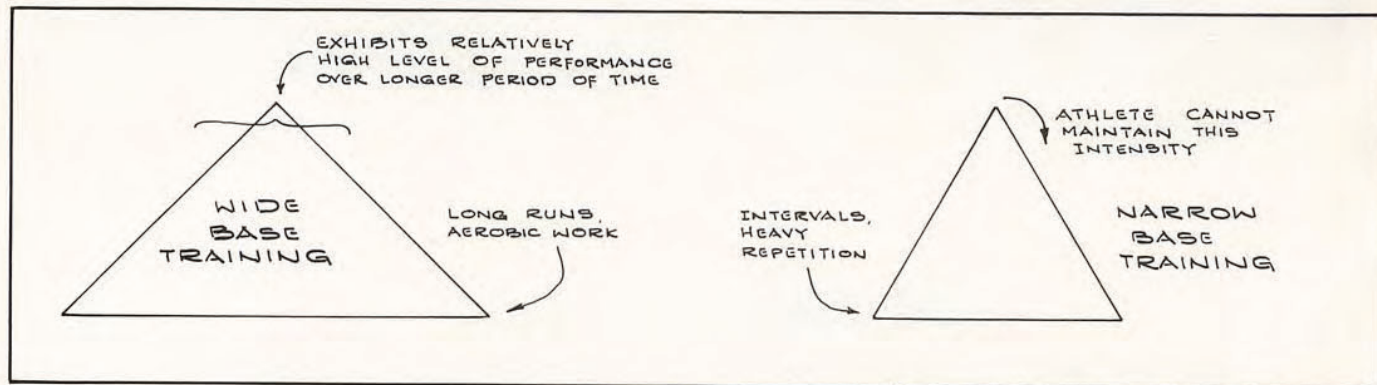
ONE of the most difficult problems facing the cross-country coach is establishing a philosophy of training that will take into consideration the overall effects of high intensity work on runners who are two- and possibly three-sport athletes. Does or should a coach peak such athletes for major cross-country competition? If so, how will these athletes perform in a winter sport such as basketball or wrestling? Of even greater importance to the distance running coach is the effect that cross-country peaking will have on spring track performances. Is it possible for such all-around athletes to become physically flat? If so, how does the coach cope with the problem of over-training and over-racing?

Many coaches would say that a good runner should approach the cross-country season as the foundation cycle for spring track. In fact, many college athletes actually run through cross-country in preparation for their particular track specialties. At Kansas State University, for example, cross-country training is only one part of the total track workout program. It is not treated as a season in itself. In the words of Coach DeLoss Dodds, "We feel that it is detrimental to sharpen an athlete for cross-country races."

While at the University of Oregon, Coach Bill Bowerman adhered to the same philosophy. Concerning cross-country, he states: "At Oregon it is more of a preparatory season than a competitive season. Though a few meets are contested, they are relatively incidental to the primary purpose of the season: building a base of cardiovascular conditioning for the spring track season."

Such approaches work well if the coach has athletes who are pure track athletes. However, many young

Cross Country Training Systems for the All-Around Athlete



Increasing Flexibility . . .

for the PREVENTION of INJURY in SPORTS

Increased strength will greatly reduce the chances of injury in certain types of potentially dangerous situations . . . when a pulling force is imposed upon a muscular structure.

Increased muscular mass will serve the same function in an opposite situation . . . when a compression force is encountered.

So increases in both muscular mass and strength will contribute to safety in any contact sport, and in many noncontact sports . . . and it is neither necessary nor desirable to reduce flexibility in order to gain the advantage of increased muscular mass and strength. In fact, if training is properly conducted with truly full range exercise, it is easily possible to increase muscular strength and size while simultaneously increasing flexibility . . . thus producing three very valuable benefits from the same brief training program.

Increased flexibility also leads to an improvement in safety . . . since it permits the body to be pulled or pushed safely into positions that might have produced an injury in a less flexible individual.

Flexibility can be improved in only one way . . . by stretching. Since stretching is not encountered in most conventional strength exercises, it has long been an accepted fact of life that exercises performed for the purpose of increasing strength would do little or nothing in the way of improving flexibility, and might actually lead to a loss in flexibility. But Nautilus has changed all that.

Nautilus exercises do provide stretching . . . while simultaneously providing the only source of full range resistance. The results being that it is now possible to provide work for the entire length and mass of a muscular structure, instead of being forced to limit the exercise to only a small part of the same muscle while doing absolutely nothing for an even larger part of the muscle . . . thus building strength and size throughout the muscles and increasing flexibility at the same time.

Nautilus of California

2285 Las Positas Road ■ Santa Barbara, California 93105 ■ Telephone (805) 687-8229

athletes, preps in particular, do not wish to be just one-sport athletes, and the mere suggestion that they de-emphasize a particular sport for the sake of another leads to all kinds of personal and administrative problems. Furthermore, what is done with the young athlete who really enjoys cross-country? In the words of cross-country coach Al Lawrence: "An athlete who enters the cross-country season with the thought of the approaching track season clouding his consciousness will not produce his best efforts."

If the coach decides not to treat cross-country as a foundation cycle for track, and instead decides to peak the runners, the problem of maintaining a high level of performance depends upon the way in which the training program has been set up. Basically, there are two types of distance training programs: the wide base program and the narrow base program.

The wide base program places a great deal of emphasis on off-season preparation in the form of Long Slow Distance and Lydiard Fartlek. The runner is responsible for a great deal of overdistance work. Lydiard, for example, recommends a minimum of 100 miles a week. The purpose of this heavy mileage is to provide an endurance basis for the later speed work and races. Thus, when the season begins, the prep runner is presumed ready for interval training, repetition runs and sprint work.

The narrow base program is what Fred Wilt might term a *crash* program. This system presumes that the athlete is either new to the sport or simply has not done much independent overdistance training during the summer. Consequently, the coach must combine in a matter of weeks an entire training cycle. Since the runners will lack an endurance base, the coach must compensate by doing a majority of the training on the track in the form of intervals. Commenting on the narrow base training approach, Arthur Lydiard remarked: "We can hammer speed work into runners and get pretty good results, but what happens to them later on? They don't become great athletes." He goes on to say "You start putting little kids on the track and hammer speed work on them, sure, they may run some great races, but what are they going to do in two or three years' time?"

With the wide base training approach, the athlete's performance may not reach an all time best, but a relatively high level of success will be sustained over a longer period of time. In essence, the

Ken Jakalski is a graduate of Illinois Benedictine College, Lisle, Illinois, and has been coaching cross-country at Aurora Central Catholic for the past three years. Two years ago his 440 and mile-relay teams qualified for state competition, barely missing the finals in both events, and last year his cross-country team finished first in the Private School League.

athlete will peak lower but will sustain the level of success longer.

With the narrow base training approach, the athlete may on occasion reach an all time best (such as Bob Beamon's long jump), but will fail to maintain this consistently high level of performance and will fade as fast as he has peaked. As Toni Nett said of this system: "The interval training is time saving, with a high stimulus, but has the disadvantage that the achieved condition may not be long lasting. The time consuming long distance running achieves the same results, but the effect is stable, a solid foundation to build on for the other methods."

Both training systems have been used by world class athletes. The wide base training approach, with its heavy concentration on capillary development through long run, has been used by such greats as Peter Snell, Murray Halberg and Bill Baillie. The narrow base training approach, with its emphasis on intervals, repeated fast 220's and the like, has been used by world record holders such as Sandor Iharos, Jim Beatty and Bob Schul. Though the Europeans claim to adhere to the wide base training approach, there are some distance runners in Europe who seem to come out of nowhere to peak for the big ones and then are not heard from afterward. Arthur Lydiard to this day contends that even the great Jim Ryun would never have encountered all the difficulties he did had he been trained in a more scientific fashion with a greater emphasis placed on building a wide endurance base and less concentration on peaking through heavy repetitions. Perhaps Ken Doherty summed it up best when he pointed out that the degree to which peaking or pointing for competition is emphasized tends to be related to the number of months of each year devoted to training, and to the soundness of one's endurance fitness. Doherty stated: "Those coaches and runners who make the greatest ado about being at a high point at just the right moment tend to be those who do too little too late. They tend to rely on high intensities of training and lack the bottom founda-

tion of long mileage training."

In establishing a workout program for the multi-sport athlete, the coach must fit the training to the goals of the athlete and the demands of the sport or season. If the demand of the sport is low or the duration of that demand is limited to one season, the athlete's goals can be set high. If the demand of the sport is great, as in cross-country, and the duration of the demand extends over a longer period of time, as is the case with a two- or three-sport athlete, the goals should be lowered and a wider training base used. A narrow training approach might lead to phenomenal three-mile times for a particular athlete, but this same athlete should not be expected to deliver an encore when track season rolls around.

The problem, then, is not just *if* a runner should peak, but *how* he should peak. For the multi-talented cross-country runner who will wrestle or run track later in the year, a wide base training which involves a gradual transition from aerobic work in the form of marathon training and long slow distance, to anaerobic work in the form of repetition runs, tempo training and sprint work, seems to be the best approach.

Arthur Lydiard has always felt that if we could stretch out the conditioning period — the aerobic training period — we could get better results. However, he concludes, "We don't always have time, particularly in the United States where people do indoor racing when they should be conditioning. When they start racing outdoors, they can't hold their form long enough even if they do hit a good peak of fitness."

A cross-country coach who chooses to peak two- or three-sport athletes for major competition should make certain that these athletes have been involved in a well-organized summer endurance training program which emphasizes aerobic conditioning aimed at increasing oxygen uptake and capillary development.

If the coach insists on using the track for training, heavy repetition work should be avoided. In order to break the monotony of interval training, the coach should concentrate on adding fartlek-type variety to the track workouts. Placing benches on the track for the runners to step over in steeplechase fashion is just one example of breaking interval monotony while at the same time training for muscular strength.

If the coach feels the runners need a greater amount of anaerobic work, a
(Concluded on page 42)



GARY HIGLEY
Eugene, Oregon

ANOTHER 'SECOND EFFORT' SUCCESS STORY ON THE AMERICAN BANKERS COACHES' TEAM...



"Excitement generates excitement!" That's how high school principal and former coach, Gary Higley, describes his three-year association with American Bankers...an association which has seen him rise to become one of the company's most outstanding part-time associates.

Success has become a way of life for Gary, whose 14-year coaching and teaching career has been characterized by victories both on and off the field. He was recognized as one of the top-ranking coaches in the state, where in the sporting arenas of baseball and football Gary led his teams to regional, league and state championships.

If success could be measured by trophies alone, Gary had certainly achieved it. But as he discovered, the thrills and triumphs on the playing field could not provide the little extras in life that everyone strives for. Each year, Gary faced the same problem: how to earn enough money during the summer months to keep things going until school started again in the fall. And he almost missed the chance to solve that problem.

"After throwing away several invitations to an American Bankers Opportunity Seminar, I got a call from an old college friend...who was one of their representatives. He convinced me to go and see what it was all about—and it was one of the best moves I've ever made."

Two months later, Gary was licensed and contracted with American Bankers; and during the following months he found the answer to his yearly money problems. Having been a professional motivator of students for so many years, he turned that motivation around and made it work for himself. In his third month with the company, Gary sold over \$10,000 of annualized premium...went on to win almost every award offered by American Bankers...and won a trip to the International Convention in Spain.

Gary's summers used to be spent scrambling for a job to see him through. "Now my summers are all planned out with American Bankers, plus three or four times the income. I can plan my own time, take time off when I want, and have a super vacation with my family while going to the conventions."

"American Bankers has certainly been a highlight in my life. It helped me develop my business potential, and the extra income has been unbelievable. These exciting things that happened to me, could happen to you...if only you don't 'throw the opportunity away!'"

If you're a coach and would like an exceptional opportunity to supplement your income during off-seasons and summers...write to the Coaches' Department, at American Bankers International Headquarters, 600 Brickell Avenue, Miami, Florida, 33131. They'll help you all the way!



AMERICAN BANKERS...THE COMPANY THAT KEEPS COACHES IN COACHING

Nautilus —

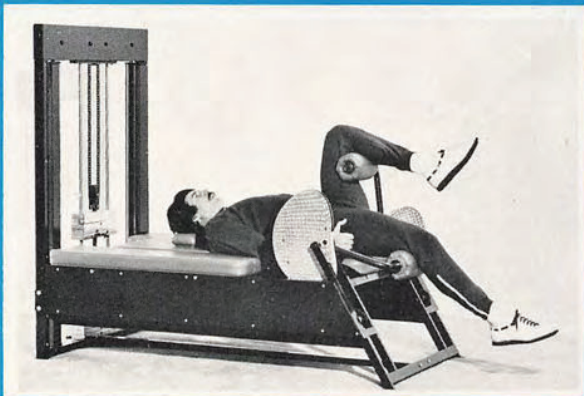
for the prevention and rehabilitation of sports injuries

Full-range exercise has certain requirements. Lacking even one of these requirements, full-range exercise is impossible.

Exercise can be provided in a number of ways, but full-range exercise can be provided in only one way. Nautilus is the only source of full-range exercise.

“Function dictates design”, and the requirements for full-range exercise dictated the design of Nautilus equipment.

Improved flexibility increases speed and greatly reduces the chances of injury . . . and improvements in flexibility are a direct result of full-range exercise.



DUOsymmetric-POLYcontractile Hip and Back Machine



Leg Curl Machine

Increased strength throughout the entire length of a muscular structure improves functional ability in ANY SPORT — another direct result of full-range exercise.

Nautilus equipment is now being used by hundreds of professional, college, and high school athletic teams.

Nautilus equipment is also being used exclusively in a number of Sports/Medical Clinics operated by leading orthopedic surgeons.

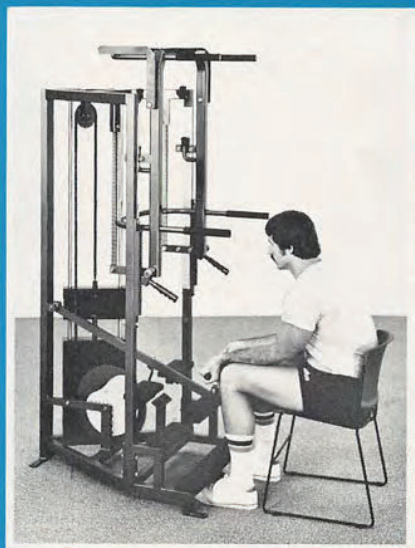
The leaders in American sports and sports/medicine chose Nautilus on the basis of facts . . . not claims . . . and the fact is that Nautilus is the ONLY source of full-range exercise.

Nautilus EQUIPMENT INC.

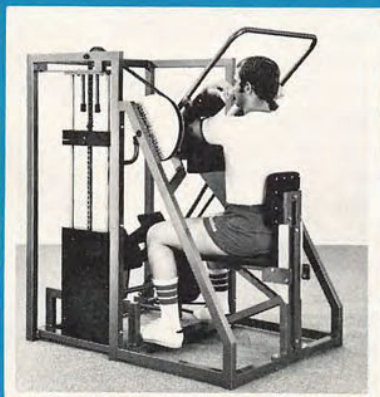
1545 W. Mockingbird Lane ■ Dallas, Texas 75235 ■ Telephone (214) 630-6564



Super Pullover Machine



Multi-Exercise Machine



Omni Biceps Machine



4-Way Neck Machine

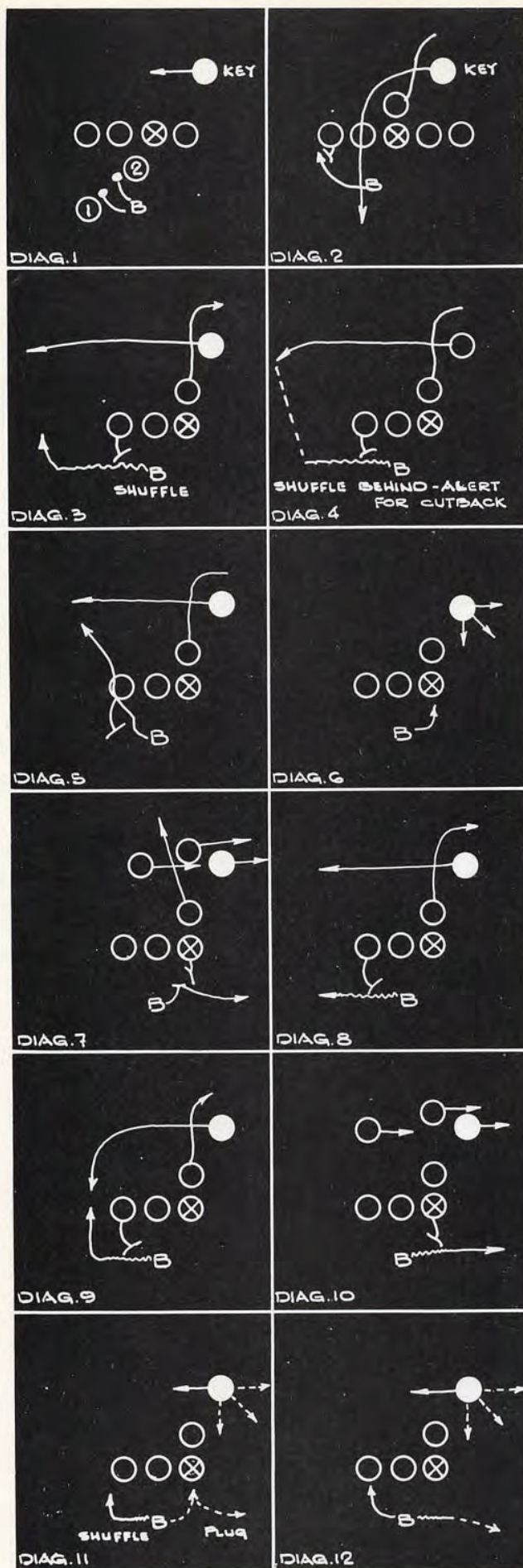


Double Chest Machine

PURSUIT PATTERNS For SPLIT 4 INSIDE LINEBACKERS

By JOHN DURHAM

Head Football Coach,
Keystone Oaks High School, Pittsburgh, Pennsylvania



BY using different pursuit patterns for the inside linebackers, the split 4 defense can vary from its basic scheme. The early versions of the split 4 and its predecessor, the split 6, emphasized the scrape and plug methods of initial pursuit. In these methods, the linebackers use keys to determine which movement they will make. If the key is directed to the front side, the linebacker steps to his outside at a 30° angle to the line of scrimmage with his outside foot, then follows at a 45° angle with his outside foot, and then follows at a 45° angle with his inside foot (Diagram 1). These steps should bring him approximately face up on the original position of the tackle. He must read the flow of the backs. If the read alerts him that the play is coming to him, he will advance, meet, and defeat any blocker with the outside forearm. The outside forearm is coached in order to avoid overpursuit which creates a seam (Diagram 2).

If the linebacker meets a blocker on the scrape pattern, he must stop his charge, neutralize the blocker, and work across his face (Diagram 3). If he clears the block, the linebacker will shuffle parallel to the line of scrimmage, remaining slightly behind the ball, and meeting the play at the crossroads, always alert for the cutback (Diagram 4). If the scraping makes penetration, the linebacker can continue to penetrate and force the ball (Diagram 5).

The plug pattern is only used toward the center when the key directs the blocker in that direction (Diagram 6). The plug means the linebacker steps up and toward the center with the inside foot initially at a 45° angle, then squares up. He meets blocks with the inside forearm in order to avoid overrunning the play. If the flow continues in the opposite direction, the linebacker delays for a short time, then turns his shoulders and pursues the ball, deepening as he pursues (Diagram 7). He does not run around blocks, but crosses the face of opponents to continue pursuit.

The shuffle is used either as an onside or backside pursuit pattern. If the key directs onside, the linebacker shuffles in that direction, meeting blockers with the outside forearm (so as not to overrun) and crosses the face of all blockers (Diagram 8). He must shuffle parallel to the line of scrimmage and remain slightly behind the ball. The linebacker will come up for the tackle when the ball is coming across the line of scrimmage (Diagram 9).

In shuffling across the center, the path is the same, but the inside forearm is used to neutralize the block, while the linebacker delays before crossing the face of the center. Then he turns and runs in pursuit (Diagram 10).

The shuffle may be integrated so the linebacker may shuffle to

key and plug away (Diagram 11), or scrape to key and shuffle away (Diagram 12). This is done in order to best prepare the defense for the particular style of offense to be encountered in a given week.

An onside or offside key may be used to trigger the fill pattern. The linebacker takes a quick parallel step with the inside foot, then drives hard for the gap (Diagram 13) between the initial positions of the center and guard. If he meets a blocker, he stops his penetration and crosses the face of the blocker (Diagram 14). Otherwise, he continues to penetrate and force the play. The onside fill may be combined with any backside pattern while the offside fill may be combined with any frontside pattern.

The cross-fill is a backside move. On key, there is no delay crossing the center. The linebacker will shuffle very quickly to the opposite center-guard gap and drive through it (Diagram 15). If he meets a blocker on his path, he stops his charge, neutralizing the blocker with the forearm that was initially inside, then crosses his face, shuffling in pursuit. Cross-fill may be combined with any frontside pattern.

Flash is an onside move which amounts to a quick keyed stunt maneuver. On the key, the linebacker will step to his outside with the outside foot, then attempt to drive the guard-tackle gap (Diagram 16). The outside forearm is used in neutralizing the blocker. When he meets the blocker, the defender stops his charge and crosses his face (Diagram 17). The flash may be combined with any backside move.

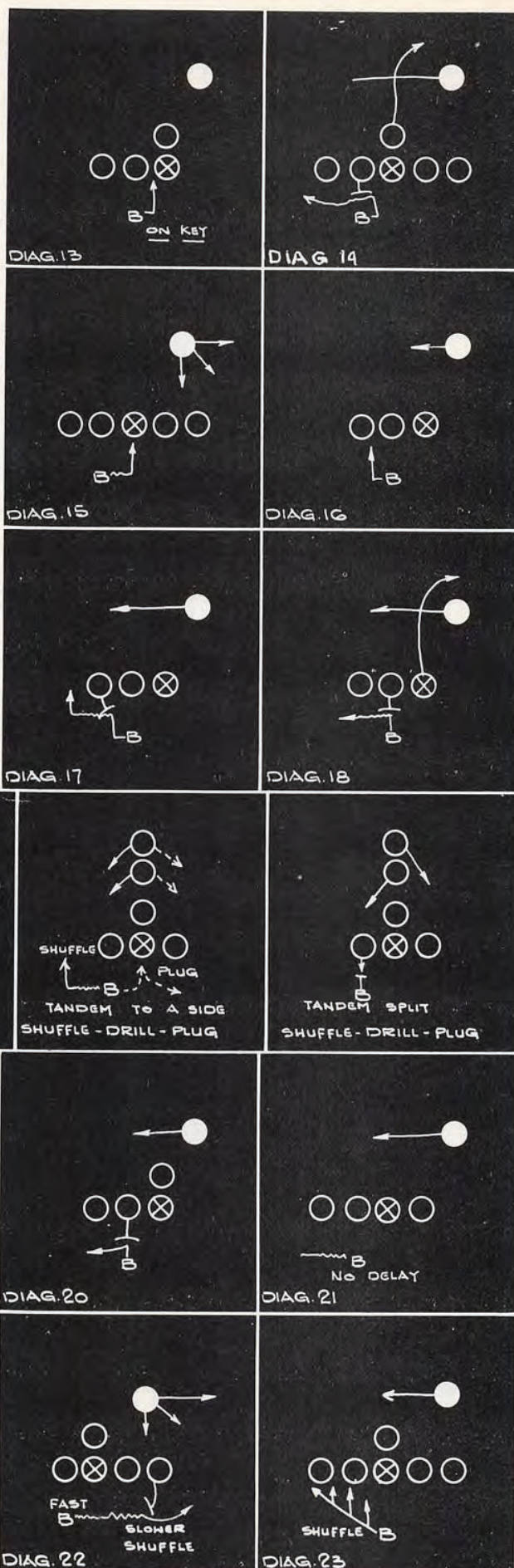
The drill pattern can be set up for use as onside, backside, or split-key (crossing backs, backs splitting from the I tandem). The linebacker drives directly for the blocker he faces and attempts to knock him back, redirecting his charge across the blocker's face (Diagram 18). Drill may be combined with any frontside or backside move and may be used as a third move on the split-key (Diagram 19).

The stuff is used onside, offside or on split-key and may be combined accordingly. On the key, the linebacker will hold his ground, defending himself with the forearm nearer the center (Diagram 20), and will not get direction until he sees the flow of the backs establish direction. He will cross the face of the blocker, shuffling behind the ball.

Swift may be a frontside or a backside pattern. It is not used for a split-key. On key, the inside linebacker shuffles very rapidly to the position of the next lineman (Diagram 21), not concerning himself during the initial steps about overpursuit. After crossing the next lineman's position, he will slow up, shuffling behind the ball as in the conventional shuffle pattern. He uses the opposite side forearm to clear the blocker during the initial part of the pattern; once he has cleared the blocker, he gears down and pursues as in the shuffle pattern, staying behind the ball and using the near forearm to clear the blocker (Diagram 22). Swift may be combined with any frontside move.

The rake pattern is used from a deeper alignment, usually four or five yards off the ball. It is an onside maneuver. The pursuit is along a line drawn to the face of the tight end or his ghost (Diagram 23). The linebacker shuffles, but at an angle toward the line, neutralizing blockers with the outside forearm. He must be careful not to overrun the ball. On reaching the face of the tight end, the linebacker will shuffle parallel to the line (Diagram 24). Rake may be combined with any backside pattern.

The pursuit patterns are utilized so as to fit into a designed defensive scheme. It may be desirable to shuffle-plug the inside line-



HOW TO SCORE AND WIN AGAINST THE TOP DEFENSES IN FOOTBALL

Announcing . . . an explosive tabbed directory for the coach and quarterback



Finally, a new revolutionary strategy "encyclopedia" . . . a 30 tabbed *Directory of Football Defenses*. The "defensive file" is totally different in design, concept and content than any other reference aid published. You simply scan the tabs and flip to the defense of your choice. Your plays are easily added.

Now you can call plays at an instant . . . No more surprise defense maneuvers . . . Improves staff communications . . . reduces errors . . . slashes preparation strategy time in half . . . excellent study guide . . . Each defense includes a colorful diagram, strengths, weaknesses, best blocking schemes, plays, and comments . . . great for QB meetings. Buy additional copies for QB's and staff as well.

by Drew Tallman, Football Coach,
Dartmouth College

Mail To: DARTMOUTH CATALOGS, Suite 68A, Box 263, Hanover, NH 03755

PLEASE SEND ME: (1 or 2) _____ copy(ies) at \$9.95 each (3 or more) _____ copies at \$8.63 each
(Add 60¢ for each copy for Postage and Packing)

I PREFER TO CHARGE:

☐ Visa/BankAmericard

☐ Master Charge

Account # _____

Exp. Date _____

Master Charge Bank # _____

TOTAL ENCLOSED (OR CHARGED) \$ _____

NAME _____

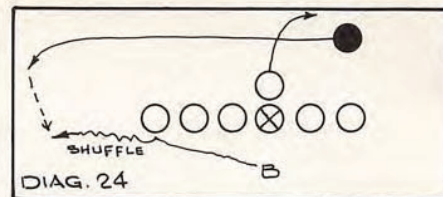
ADDRESS _____

CITY _____

STATE _____

ZIP _____

A FULL 15 DAY GUARANTEE OR IMMEDIATE REFUND



backers as illustrated in Diagram 25; another possibility is a scrape and cross-fill pattern by one backer and a

(Concluded on page 42)

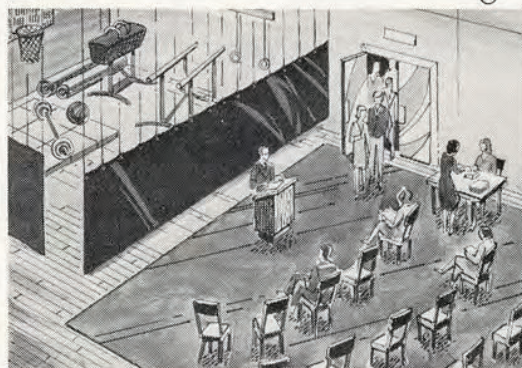
Pass Protection

(Continued from page 10)

concerned with the big rush here, however, linebacker stunts are very common off this defense. Our backside tackle would pick up any linebacker stunt on that side and the frontside guard should be aware of the other linebacker stepping inside our tackle. Again, an all-out rush here would find one man unblocked on the backside, so the tight end can be used to balance the odds.

This philosophy of pass protection can be adopted on any level of football and is especially effective in high school. The learning time is minimal when compared to dropback protection. Also, it will take up less of the practice time as the season goes on. In a run-oriented offense, 15 minutes of practice time should be sufficient in keeping the players sharp. The recognition is easily adaptable to different defensive looks and the players can adjust easily during a ball game. **TM**

pro-tec®



divider curtains field/gym floor covers

- Light-weight
- Reduces Maintenance
- Multi-use
- Improves playing conditions
- Recognized by professionals



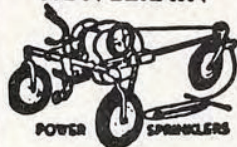
For information, write:

JOHN BOYLE & CO., INC.
Innovators since 1860

112 Duane St., New York, N.Y. 10007

AUTOMATIC IRRIGATION

TRAVELRAIN



Inexpensive — Designed for Athletic Fields.
Waters areas up to 100 x 600 ft. in one setting.
Only 10 minutes to set or removal.
Pulls itself along thru winding up a steel cable — Water Powered — Shuts off Water automatically.

\$180 to \$455 F.O.B. Factory — ask for demo offer

TRAVELRAIN

239 No. Robertson Blvd., Beverly Hills, Calif. 90211
(213) 276-8848 — 276-3213
Established 1935

BE A WINNER IN RENO!!

Attend the University of Nevada's

**24TH ANNUAL COACHING CLINIC
JUNE 19 THROUGH JUNE 23, 1978**

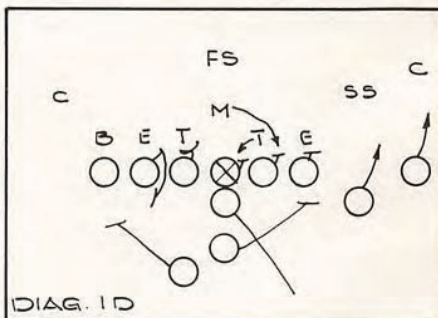
Guest Winners include:

Lou Holtz, Denny Crum, Bill Walsh, Ed-die Sutton, Bill Delinger, Bob Bennett, Chris Ault

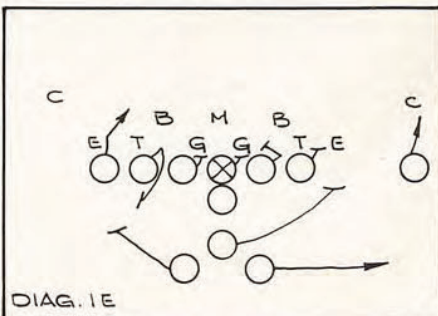
Earn up to two undergraduate credits

Write: Summer Session, UNR
Reno, Nevada 89557

Or Call: 702-784-4062



DIAG. 1D



DIAG. 1E

INDEX FOR VOLUME FIFTY-EIGHT

The second number indicates the issue (September No. 1, January No. 5, June No. 10, etc.). The third series of numbers refers to the page on which the article appears.

A

- Akers, John, The Necessary Evil of Punting 58- 1-74
 Alexander, E. Dennis, Faking —
 The Neglected Fundamental 58- 2-58
 Allen, George, Football Clinic 58- 1-50
 Allen, George, Football Clinic 58- 2-32
 Allman, Fred, M.D., Sports Medical Advisor 58- 2-34
 Allman, Fred, M.D., Sports Medical Advisor 58- 5-22
 Andrews, Robert, Attacking the Box-and-One 58- 2-12
 Annunziata, Dom, The 1-3-1 Offense Against a Sagging
 Man-for-Man 58- 3-64
 Anthony, Susan, Taping Techniques, Collateral Ligament
 Strapping the Knee 58- 2-70
 Anthony, Susan, Taping Techniques,
 Elbow Hyperextension 58- 5-16
 Anthony, Susan, Taping Techniques,
 Groin Strain Wrap 58- 4-56
 Anthony, Susan, Taping Techniques,
 Patellar Strapping 58- 3-46
 Anthony, Susan, Taping Techniques,
 Shin Splints 58- 1-44
 Arens, Jerry, Continuity Zone Offense 58- 1-62

B

- Bailey, Robert, Player-for-Player Defense 58- 9-60
 Baseball: Baserunning, Aggressive 58- 6-64
 Ken Dugan
 Baseball: Batting Order, Arranging the 58- 5-40
 Charles A. Field
 Baseball: Bunting, The Fine Art of 58- 7-60
 Ken Dugan
 Baseball: Calling His Pitches, Help that Pitcher by 58- 5-52
 John H. Flynt
 Baseball: Catcher, Drills for the 58- 7-37
 Tom Dedin
 Baseball: Hitter, Working on the 58- 6-34
 Don Weiskopf
 Baseball: Hitting Drills, Isolated 58- 6-58
 Mark Johnson
 Baseball: Hitting, The Forgotten Areas of 58- 7-76
 Leon A. Lande
 Baseball: Organizational Needs, Calendar Approach to 58- 4-47
 David C. Hinze
 Baseball: Outside Pitch to the Opposite Field,
 Hitting the 58- 6-78
 Mike Lane
 Baseball: Pickoff Plays to Stop Rallies, Successful 58- 6-42
 Kirk R. Hulbert
 Baseball: Pitchers, Precision Drills for 58- 7-46
 Joseph Russo
 Baseball: Pitching is a Four-Count Exercise 58- 7-14
 Dr. Paul D. Radcliff
 Baseball: Right Fielder, Choosing and Improving the 58- 6-82
 John W. Bell
 Baseball: Second Base, The Pivot at 58- 7-40
 Bill Krejci
 Baseball: Sliders, Teaching the 58- 5-18
 Ken Dugan
 Baseball: Stance-Stride in Hitting, The 58- 5-14
 Leon A. Lande
 Baseball: Stealer, A Different Way to Throw Out a 58- 8-54
 Gary Cunningham
 Baseball: Third Base Coaching Guidelines 58- 3-73
 Ronald G. Polk
 Bash, Ron, Balance is Power 58- 3-20
 Basketball: Balance is Power 58- 3-20
 Ron Bash
 Basketball: Box-and-One, Attacking the 58- 2-12
 Robert Andrews
 Basketball: Box Shuffle, The 58- 3-54
 David Miller
 Basketball: Come From Behind 58- 2-52
 Bill Van Gundy
 Basketball: Defense, Posting the 58- 2-10
 Walt Kilcullen

- Basketball: Defenses, Combatting Sloughing 58- 3-30
 Robert Voth
 Basketball: Defenses + and —, The 58- 2-38
 Charles A. Field
 Basketball: Defensive Drills, Progressive 58- 1-68
 Philip Gradoville
 Basketball: Delay Game, Detroit's 58- 2-18
 Dick Vitale
 Basketball: Delay Game, Triangle and Two 58- 3-22
 Terrance J. O'Connor
 Basketball: Delay Offense 58- 3-18
 Jack Jackson
 Basketball: Double Screen Baseline Series 58- 4- 8
 Barry Hecker
 Basketball: Faking — The Neglected Fundamental 58- 2-58
 E. Dennis Alexander
 Basketball: Fast Break Every Time, Controlled 58- 3-24
 Eddie Greer
 Basketball: Full-Court Press, Breakdown Drills of the
 2-1-2 Lopsided 58- 2-30
 Billy Gonzalez
 Basketball: Half-Court Zone Defense, Variations of
 the 1-2-2 58- 2-46
 Ronald Kautzner
 Basketball: Offense, Continuity Zone 58- 1-62
 Jerry Arens
 Basketball: Offense, Diamond Pressure 58- 2-50
 Bruce E. Brown
 Basketball: Offense, 1977-'78 58-10-34
 Nelson Nitchman
 Basketball: Offense, Quick Shot or Late Game 58- 3-60
 Roscoe Denney
 Basketball: Offensive Continuity,
 Shooting Dice with the 58- 4-10
 William F. Stier, Jr. and Jay Dougherty
 Basketball: Offensive Corner Player, Molding the 58- 3- 8
 Howie Landa
 Basketball: Offensive Moves for Women Basketball Players,
 Individual 58- 2-66
 Howie Landa
 Basketball: 1-4 Offense, Nicholls' 58- 3-33
 Don Landry
 Basketball: 1-3-1 Offense Against a
 Sagging Man-for-Man, The 58- 3-64
 Dom Annunziata
 Basketball: 1-3-1 Rotational Offense 58- 3-65
 Al Schnabel
 Basketball: Passing on the Run 58- 2-20
 Randy D. Miller
 Basketball: Post Offense, Changing 58- 3-12
 Robert Lehr
 Basketball: Post or Pivot Play, Developing Players for 58- 4-14
 Howie Landa
 Basketball: Practice, Skill Checks During 58- 3-34
 Alice Simpson
 Basketball: Press Breaker 58- 2- 8
 Wayne Boultinghouse
 Basketball: Press, Spread the 58- 4-34
 Louis P. Campanelli
 Basketball: Pressure Defenses, Attacking 58- 3-44
 Dick Vitale
 Basketball: Screening 58- 1-78
 Dr. Allen R. Bonnette
 Basketball: Three Guard Shuffle with the Strong Side
 Series, The Modified Version of the 58- 4-32
 Billy G. Gonzalez
 Basketball: 24 Second Game, The 58- 4-40
 Frank Gourdouze
 Basketball: Zones, Zeroing in on the 58- 3-28
 Vince Eldred
 Bell, John W., Choosing and Improving the
 Right Fielder 58- 6-82
 Berger, Richard, How Best to Train 58- 1-30
 Bonalewicz, Richard M., Cardiovascular Training
 for Catchers 58- 5-50
 Bonnette, Dr. Allen R., Screening 58- 1-78
 Books, New 58- 3-53

Books, New	58- 4-52
Books, New	58- 5-69
Books, New	58- 8-83
Boultinghouse, Wayne, Press Breaker	58- 2- 8
Broad, Richard D., Developing Flexibility in the Soccer Player	58- 8-68
Brooks, Christine, Developing the Female Distance Runner	58- 5- 8
Brooks, Jim, Unbalanced Look in the Wing T Offense	58- 8-30
Brown, Barry S., The Winning Edge — A Different Twist to Tennis Conditioning	58- 4-39
Brown, Bruce E., Diamond Pressure Offense	58- 2-50
Brunetti, Al, The I: An Offense for All Seasons	58- 7-32
Bush, Jim, Relay Racing	58- 7- 8

C

Campanelli, Louis P., Spread the Press	58- 4-34
Cheek, Frank, From Counter to Counter	58- 3-26
Christie, Vandy, Improve Your Net Profit	58- 8-72
Ciamillo, Frank, The Wishbone Look	58- 1-18
Coaching Profession: Its Effect on the Coach's Family, The	58- 9-42
<i>Ralph Sabock and David Jones</i>	
Colfer, George R., Innovative Place Kicking	58- 1- 8
Crawford, Scott A.G.M., The Positional Role in Soccer Training	58- 1-54
Crews, Dr. Thad, Determination and Assessment of a Fitness Profile for Football Players	58- 8-78
Cunningham, Gary, A Different Way to Throw Out a Stealer	58- 8-54

D

Davis, William, Winning Soccer Matches by Constructive Talking	58-10-12
Dedin, Tom, Drills for the Catcher	58- 7-37
DeMeo, Tony, The Quick Draw	58- 9-56
Denney, Roscoe, Quick Shot or Late Game Offense	58- 3-60
Dougherty, Jay, Shooting Dice with the Four Corner Offensive Continuity	58- 4-10
Dudas, William, Updating the Record Board	58- 7-50
Dugan, Ken, Aggressive Baserunning	58- 6-64
Dugan, Ken, Teaching the Sliders	58- 5-18
Dugan, Ken, The Fine Art of Bunting	58- 7-60
Dunn, Mike, New Trends with the I Bone Option	58- 9-12
Durham, John, Pursuit Patterns for Split 4 Inside Linebackers	58-10-20

E

Eagan, James, Flexible Pass Coverage with a 4-4	58- 8-33
Ecker, Tom, Linear vs. Rotary Shot Putting	58- 7-16
Ecker, Tom, Mac Wilkins: Olympic Discus Thrower	58- 6-60
Eldred, Vince, Don't Let the Wind Get You Down	58- 7-78
Eldred, Vince, Serve Flat or Spin — Get It In	58- 5-46
Eldred, Vince, Think Mini-Court!	58- 6-86
Eldred, Vince, Zeroing in on the Zones	58- 3-28
Ergogenic Aids for Athletes, Possible	58- 2-61
<i>Dr. Clayne Jensen</i>	
Ervin, Mike, The Bump Technique	58- 9-38
Evaluating the Athlete, The Role of the Coach in (Part 1)	58- 1-84
<i>Dr. Richard W. Redfearn</i>	
Evaluating the Athlete, The Role of the Coach in (Part 2)	58- 2-22
<i>Dr. Richard W. Redfearn</i>	

F

Facilities and Equipment: Athletic Clothing, Basic Fabric Structures in	58- 8-74
Facilities and Equipment: It Helps to Spin a Good Yarn	58- 7-58
Facilities and Equipment: Record Board, Updating the	58- 7-50
<i>William Dudas</i>	
Facilities and Equipment: Wrestling Mats, The Selection and Care of	58- 5-26
<i>Raymond J. Passarelli</i>	
Fairs, John, The Role of the Ball Toss in the Slice Serve	58- 7-52
Field, Charles A., Arranging the Batting Order	58- 5-40
Field, Charles A., The Defenses + and —	58- 2-38
Findlay, Jim, Cross-Country Invitationals	58- 1-70

Flanagan, Pat, Cross-Body Counters	58- 4-16
Flynt, John H., Help the Pitcher by Calling his Pitches	58- 5-52
Football: Backfield Blocking: The Forgotten Art	58- 9- 8
<i>Michael D. Koehler</i>	
Football: Beat the Safeties and Win	58- 9-46
<i>Don Read</i>	
Football: Blocking, ABC	58-10-44
<i>Allen Hewins</i>	
Football: Blocking the Linebackers	58- 1-48
<i>Tom Lapinski</i>	
Football: Bump Technique, The	58- 9-38
<i>Mike Ervin</i>	
Football: Defense From a Basic Core, Multiple	58- 1-64
<i>Robert Goff</i>	
Football: Eight-Man Front, Attacking the	58- 8-81
<i>James D. Semones</i>	
Football: Football Clinic	58- 1-50
<i>George Allen</i>	
Football: Football Clinic	58- 2-32
<i>George Allen</i>	
Football: 4-4, Flexible Pass Coverage with a	58- 8-33
<i>James Eagan</i>	
Football: 4-4, Stopping the Wishbone with a	58- 8-32
<i>Harold Robinson</i>	
Football: Fullback Belly Series and Its Many Options	58- 1-22
<i>Dennis Green</i>	
Football: Hand Shiver Technique, The	58- 9-20
<i>Vic Rowen</i>	
Football: I: An Offense for All Seasons, The	58- 7-32
<i>Al Brunetti</i>	
Football: I Bone Option, New Trends with the	58- 9-12
<i>Mike Dunn</i>	
Football: Interior Line Play vs. the Run	58- 8- 9
<i>Dave Price</i>	
Football: Kicking Game Drills and Development	58- 1-32
<i>Bill Snyder</i>	
Football: Offense, 1977 Football (Part 1)	58- 8-22
<i>Nelson Nitchman</i>	
Football: Offense, 1977 Football (Part 2)	58- 9-32
<i>Nelson Nitchman</i>	
Football: Pass Coverages from a Four-Deep Secondary	58-10-52
<i>Bob Oravitz</i>	
Football: Pass Protection	58- 8-70
<i>Keith Rowen</i>	
Football: Pass Protection, Effective Sprint-Out	58-10- 8
<i>Mike O'Neill</i>	
Football: Pivotal Position, Versatility at the	58- 9-29
<i>Harry Van Arsdale</i>	
Football: Place Kicking, Innovative	58- 1- 8
<i>George Colfer</i>	
Football: Play Fake Pass	58- 1-60
<i>Charles LaBarca</i>	
Football: Play 5 Under — 2 Deep and Win	58- 1-20
<i>Rick Taylor</i>	
Football: Pressbox Coaching, Organization for	58- 8-53
<i>Link Fuller and Julian Smith</i>	
Football: Punting, The Necessary Evil of	58- 1-74
<i>John Akers</i>	
Football: Quick Draw, The	58- 9-56
<i>Tony DeMeo</i>	
Football: 6-5 Backers' Flex Goal Line Defense, The	58- 9-18
<i>Daniel Lounsbury</i>	
Football: Split 4, Bump and Run with the	58- 7-26
<i>Bill T. Ross</i>	
Football: Split 4 Inside Linebackers, Pursuit Patterns for	58-10-20
<i>John Durham</i>	
Football: Spread	58- 1-52
<i>Jim Walsh</i>	
Football: 10-Minute Scope Drill, The	58-8-106
<i>Edward Frey</i>	
Football: Three-Deep Secondary, Rotating the	58- 9-14
<i>Robert Ford</i>	
Football: Triple Option, Line Blocking for the	58- 9-54
<i>Kenneth Platt and Mark Mayson</i>	
Football: Wing T Offense, Unbalanced Look in the	58- 8-30
<i>Joe Purzycki and Jim Brooks</i>	
Football: Wing T, Veer Series From the	58- 1-39
<i>Larry Strauch</i>	
Football: Wishbone Look, The	58- 1-18
<i>Frank Ciamillo</i>	
Ford, Robert, Rotating the Three-Deep Secondary	58- 9-14
Frazier, Charles S., Developing Power Volleyball Power	58- 3-32
Frey, Edward, The 10-Minute Scope Drill	58-8-106

Fuller, Link, Organization for Pressbox Coaching	58- 8-53
--	----------

G

Goff, Robert H., Multiple Defense From a Basic Core.....	58- 1-64
Golf: Short Game, Drills for Improving the	58- 8-64
<i>Dick Tays</i>	

Gonzalez, Billy G., Breakdown Drills of the 2-1-2 Lopsided Full-Court Press	58- 2-30
Gonzalez, Billy G., The Modified Version of the Three Guard Shuffle with the Strong Side Series.....	58- 4-32
Gourdouze, Frank, The 24 Second Game	58- 4-40
Grace, Robert, The In-Season Power Program	58- 8-56
Gradoville, Philip, Progressive Defensive Drills.....	58- 1-68
Green, Dennis, Fullback Belly Series and Its Many Options.....	58- 1-22
Greer, Eddie, Controlled Fast Break Every Time.....	58- 3-24

H

Hecker, Barry, Double Screen Baseline Series	58- 4- 8
Hewins, Allen, ABC Blocking	58-10-44
Hinze, David C., Calendar Approach to Organizational Needs	58- 4-47
Hockey: Penalty Killing Stacked Defense	58- 4-26
<i>Ron Watson</i>	
Hodish, Alan, Coaching the Face-Off in Lacrosse.....	58- 8-14
Hulbert, Kirk R., Successful Pickoff Plays to Stop Rallies	58- 6-42

I

Items, New.....	58-1-106
Items, New.....	58- 2-84
Items, New.....	58- 3-84
Items, New.....	58- 4-74
Items, New.....	58- 5-84
Items, New.....	58-6-106
Items, New.....	58- 7-98
Items, New.....	58-8-114
Items, New.....	58- 9-78
Items, New.....	58-10-58

J

Jackson, Jack, Delay Offense	58- 3-18
Jakalski, Ken, A New Approach to the Crouch Start.....	58- 7-24
Jakalski, Ken, Cross-Country Training Systems for the All-Around Athlete	58-10-14
Jaster, Sally, Developing Power Volleyball Power.....	58- 3-32
Jenkins, Robert, Sprint Relay Racing — South Carolina Style	58- 6-33
Jensen, Dr. Clayne, Possible Ergogenic Aids for Athletes	58- 2-61
John, Joseph, All Moves Lead to a Pin.....	58- 2-64
Johnson, Mark, Isolated Hitting Drills	58- 6-58
Jones, Arthur, Predicting Athletic Ability	58- 1-56
Jones, David, The Coaching Profession: Its Effect on the Coach's Family.....	58- 9-42

K

Kautzner, Ronald C., Variations of the 1-2-2 Half-Court Zone Defense	58- 2-46
Key, James D., M.D., Sports Medical Advisor	58- 2-34
Key, James D., M.D., Sports Medical Advisor	58- 5-22
Kilcullen, Walt, Posting the Defense.....	58- 2-10
Koehler, Michael D., Backfield Blocking: The Forgotten Art	58- 9- 8
Krejci, Bill, The Pivot at Second Base	58- 7-40

L

LaBarca, Charles, Play Fake Pass	58- 1-60
Lacrosse: Face-Off in Lacrosse, Coaching the	58- 8-14
<i>Alan Hodish</i>	
Laird, Nancy, Middle Distance Training for National Level Female Runners	58- 7-30
Landa, Howie, Developing Players for Post or Pivot Play.....	58- 4-14
Landa, Howie, Individual Offensive Moves for Women Basketball Players	58- 2-66
Landa, Howie, Molding the Offensive Corner Player.....	58- 3- 8
Lande, Leon A., The Forgotten Areas of Hitting.....	58- 7-76
Lande, Leon A., The Stance-Stride in Hitting.....	58- 5-14
Landry, Don, Nicholls' 1-4 Offense	58- 3-33

Lane, Mike, Hitting the Outside Pitch to the Opposite Field.....	58- 6-78
Lapinski, Tom, Blocking the Linebackers	58- 1-48
Lehr, Robert, Changing Post Offense	58- 3-12
Lounsbury, Daniel, The 6-5 Backers' Flex Goal Line Defense.....	58- 9-18

M

Mayson, Mark, Line Blocking for the Triple Option	58- 9-54
McCord, J.D., Stretching for Baseball.....	58- 5-30
McIlwain, James, Physiological Considerations for Training Female Track and Field Athletes	58- 7-72
McWilliams, C. Jay, Play the Angles.....	58- 8-82
Meadors, Dr. William, Determination and Assessment of a Fitness Profile for Football Players	58- 8-78
Miller, David, The Box Shuffle.....	58- 3-54
Miller, Randy D., Passing on the Run.....	58- 2-20
Miller, Robert D., Spinal Lordosis in the Flop.....	58-6-100
Murphy, Chet, In Teaching Tennis ... Be Flexible (Part 1)	58- 9-26
Murphy, Chet, In Teaching Tennis Be Flexible (Part 2)	58-10-27
Murray, Chris, Dona Lane	58- 7-48

N

Naugle, John A., X Marks the Spot.....	58- 2-16
Nitchman, Nelson, 1977-'78 Basketball Offense	58-10-34
Nitchman, Nelson, 1977 Football Offense (Part 1).....	58- 8-22
Nitchman, Nelson, 1977 Football Offense (Part 2).....	58- 9-32

O

O'Connor, Terrance J., Triangle and Two Delay Game.....	58- 3-22
O'Donnell, Rod, Charting the Distance Runner	58- 3-14
Olympic Winning Performances, Trends in	58- 4-44
<i>Raymond T. Stefani</i>	
O'Neill, Mike, Effective Sprint-Out Pass Protection.....	58-10- 8
Oravitz, Bob, Multiple Pass Coverages From a Four Deep Secondary.....	58-10-52

P

Passarelli, Raymond J., The Selection and Care of Wrestling Mats	58- 5-26
Platt, Kenneth, Line Blocking for the Triple Option	58- 9-54
Polk, Ronald G., Third Base Coaching Guidelines	58- 3-73
Price, Dave, Interior Line Play vs. the Run	58- 8- 9
Pucci, Thomas G., Improving the Backhand Volley	58- 8-21
Purzycki, Joe, Unbalanced Look in the Wing T Offense.....	58- 8-30

R

Radcliff, Dr. Paul D., Pitching is a Four-Count Exercise.....	58- 7-14
Read, Don, Beat the Safeties and Win	58- 9-46
Redfearn, Dr. Richard, The Role of the Coach in Evaluating the Athlete (Part 1).....	58- 1-84
Redfearn, Dr. Richard, The Role of the Coach in Evaluating the Athlete (Part 2).....	58- 2-22
Robinson, Harold, Stopping the Wishbone with a 4-4	58- 8-32
Ross, Bill T., Bump and Run with the Split 4.....	58- 7-26
Rowen, Keith, Pass Protection	58- 8-70
Rowen, Vic, The Hand Shiver Technique.....	58- 9-20
Russo, Joseph, Precision Drills for Pitchers.....	58- 7-46

S

Sabock, Ralph, The Coaching Profession: Its Effect on the Coach's Family	58- 9-42
Schnabel, Al, 1-3-1 Rotational Offense	58- 3-65
Scoles, Gordon, Depth Jumping: Does It Really Work?	58- 5-48
Scoles, Gordon, Step-by-Step Approach Toward Coaching the Flop	58- 7-48
Semones, James D., Attacking the Eight-Man Front	58- 8-81
Simpson, Alice, Skill Checks During Practice	58- 3-34
Sipe, Darren, Single Leg Takedown	58- 4-20
Smith, Julian, Organization for Pressbox Coaching	58- 8-53
Snyder, Bill, Kicking Game Drills and Development.....	58- 1-32
Soccer: Defense, Player-for-Player	58- 9-60
<i>Robert Bailey</i>	
Soccer: Flexibility in the Soccer Player, Developing	58- 8-68
<i>Richard D. Broad</i>	
Soccer: Positional Role in Soccer Training, The	58- 1-54
<i>Scott A.G.M. Crawford</i>	

Soccer: Talking, Winning Soccer Matches by Constructive	58-10-12
Stefani, Raymond T., Trends in Olympic Winning Performances	58- 4-44
Stier, William F., Jr., Shooting Dice with the Four Corner Offensive Continuity	58- 4-10
Strauch, Larry, Veer Series From the Wing T	58- 1-39
Strome, Steve, Conditioning and Training Program for the School Tennis Coach	58- 3-50

T

Tamberelli, Al, Prevention and Care of the Knee Injury	58- 6-40
Taylor, Rick, Play 5 Under — 2 Deep and Win	58- 1-20
Tays, Dick, Drills for Improving the Short Game	58- 8-64
Tennis: Angles, Play the	58- 8-82
<i>C. Jay McWilliams</i>	
Tennis: Backhand Volley, Improving the	58- 8-21
<i>Thomas G. Pucci</i>	
Tennis: Ball Toss in the Slice Serve, The Role of the	58- 7-52
<i>John Fairs</i>	
Tennis: Don't Let the Wind Get You Down	58- 7-78
<i>Vince Eldred</i>	
Tennis: Early Session Tennis Workout	58- 5-44
<i>Harold G. Wall</i>	
Tennis: Improve Your Net Profit	58- 8-72
<i>Vandy Christie</i>	
Tennis: In Teaching Tennis . . . Be Flexible (Part 1)	58- 9-26
<i>Dr. Chet Murphy</i>	
Tennis: In Teaching Tennis. . . Be Flexible (Part 2)	58-10-27
<i>Dr. Chet Murphy</i>	
Tennis: Serve Flat or Spin — Get It In	58- 5-46
<i>Vince Eldred</i>	
Tennis: Think Mini-Court!	58- 6-86
<i>Vince Eldred</i>	
Terauds, Dr. Juris, Biomechanical Analysis of the Sliding Pole Vault Carry	58- 6-84
Thompson, Deborah K., The Winning Edge — A Different Twist to Tennis Conditioning	58- 4-39
Track and Field: Cross-Country Invitationals	58- 1-70
<i>Jim Findlay</i>	
Track and Field: Cross-Country Training Systems for the All-Around Athlete	58-10-14
<i>Ken Jakalski</i>	
Track and Field: Crouch Start, A New Approach to the	58- 7-24
<i>Ken Jakalski</i>	
Track and Field: Depth Jumping: Does it Really Work?	58- 5-48
<i>Gordon Scoles</i>	
Track and Field: Distance Runner, Charting the	58- 3-14
<i>Rod O'Donnell</i>	
Track and Field: Female Distance Runner, Developing the	58- 5- 8
<i>Christine Brooks</i>	
Track and Field: Female Runners, Middle Distance Training for National Level	58- 7-30
<i>Nancy Laird</i>	
Track and Field: Female Track and Field Athletes, Physiological Considerations for Training	58- 7-72
<i>James McIlwain</i>	
Track and Field: Flop, Step-by-Step Approach Toward Coaching the	58- 7-48
<i>Gordon Scoles</i>	
Track and Field: Hop Takeoff in Triple Jumping? Should Double-Arm Action be Used in the	58- 6-54
<i>Fred Wilt</i>	
Track and Field: Lane, Dona	58- 7-48
<i>Chris Murray</i>	
Track and Field: National Honor Roll	58- 7-22
Track and Field: Pole Vault Carry, Biomechanical Analysis of the Sliding	58- 6-84
<i>Dr. Juris Terauds</i>	
Track and Field: Relay Racing	58- 7- 8
<i>Jim Bush and Don Weiskopf</i>	
Track and Field: Shot Putting, Linear vs. Rotary	58- 7-16
<i>Tom Ecker</i>	
Track and Field: Sprint Relay Racing South Carolina Style	58- 6-33
<i>Robert Jenkins</i>	
Track and Field: Thirty-Second Annual Track Meet, California Wins	58- 6-46
Track and Field: Track in the High Schools	58- 6-48
Track and Field: Wilkins, Mac, Olympic Discus Thrower	58- 6-60
<i>Tom Ecker</i>	

Track and Field: Women, Wake Up!	58- 5-32
<i>Ed Tucker</i>	
Training and Conditioning: Baseball, Stretching for	58- 5-30
<i>J. D. "Bubba" McCord</i>	
Training and Conditioning: Catchers, Cardiovascular Training for	58- 5-50
<i>Richard M. Bonalewicz</i>	
Training and Conditioning: Collateral Ligament Strapping the Knee, Taping Techniques	58- 2-70
<i>Susan Anthony</i>	
Training and Conditioning: Elbow Hyperextension, Taping Techniques	58- 5-16
<i>Susan Anthony</i>	
Training and Conditioning: Flop, Spinal Lordosis in the	58-6-100
<i>Robert D. Miller</i>	
Training and Conditioning: Football Players, Determination and Assessment of a Fitness Profile for	58- 8-78
<i>Dr. William Meadors and Dr. Thad Crews</i>	
Training and Conditioning: Groin Strain Wrap, Taping Techniques	58- 4-56
<i>Susan Anthony</i>	
Training and Conditioning: How Best to Train	58- 1-30
<i>Richard Berger</i>	
Training and Conditioning: In-Season Power Program, The	58- 8-56
<i>Robert Grace</i>	
Training and Conditioning: Knee Injury, Prevention and Care of the	58- 6-40
<i>Al Tamberelli</i>	
Training and Conditioning: Patellar Strapping, Taping Techniques	58- 3-46
<i>Susan Anthony</i>	
Training and Conditioning: Predicting Athletic Ability	58- 1-56
<i>Arthur Jones</i>	
Training and Conditioning: Shin Splints, Taping Techniques	58- 1-44
<i>Susan Anthony</i>	
Training and Conditioning: Sock Wrap, The	58- 6-61
<i>Terry Wynn</i>	
Training and Conditioning: Sports Medical Advisor	58- 2-34
<i>Fred Allman, M.D. and James D. Key, M.D.</i>	
Training and Conditioning: Sports Medical Advisor	58- 5-22
<i>Fred Allman, M.D. and James D. Key, M.D.</i>	
Training and Conditioning: Tennis Coach, Conditioning and Training Program for the School	58- 3-50
<i>Steve Strome</i>	
Training and Conditioning: Tennis Conditioning, The Winning Edge — A Different Twist to	58- 4-39
<i>Deborah K. Thompson and Barry S. Brown</i>	
Training and Conditioning: Volleyball Power, Developing Power	58- 3-32
<i>Sally Jaster and Charles S. Frazier</i>	
Tucker, Ed, Women, Wake Up!	58- 5-32

V

Van Arsdale, Harry, Versatility at the Pivotal Position	58- 9-29
Van Gundy, Bill, Come From Behind	58- 2-52
Vitale, Dick, Attacking Pressure Defenses	58- 3-44
Vitale, Dick, Detroit's Delay Game	58- 2-18
Voth, Robert, Combatting Sloughing Defenses	58- 3-30

W

Wall, Harold G., Early Session Tennis Workout	58- 5-44
Walsh, Jim, Spread	58- 1-52
Watson, Ron, Penalty Killing Stacked Defense	58- 4-26
Weiskopf, Don, Relay Racing	58- 7- 8
Weiskopf, Don, Working on the Hitter	58- 6-34
Wilt, Fred, Should Double-Arm Action be Used in the Hop Takeoff in Triple Jumping?	58- 6-54
Wrestling: Cross-Body Counters	58- 4-16
<i>Pat Flanagan</i>	
Wrestling: From Counter to Counter	58- 3-26
<i>Frank Cheek</i>	
Wrestling: Pin, All Moves Lead to a	58- 2-64
<i>Joseph John</i>	
Wrestling: Single Leg Takedown	58- 4-20
<i>Darren Sipe</i>	
Wrestling: X Marks the Spot	58- 2-16
<i>John Naugle</i>	
Wynn, Terry, The Sock Wrap	58- 6-61



IN TEACHING TENNIS . . .

BE FLEXIBLE!

Part Two

By DR. CHET MURPHY
Coordinator of Tennis Instruction,
University of California, Berkeley, California

In the first part of his article appearing in the May issue, tennis teacher and coach, Chet Murphy, stresses the importance of understanding each student in order to properly motivate him/her and build upon the capabilities of the player to be.

If, for example, an uninterested student appears to like serving (he may have seen someone serve and, imitating him, found that he likes it), it may be wise to permit him to serve, even though serving is not included in the current lesson plan. Another student may like the continued action that backboard rally practice provides, and he may be bored with the drills. The best approach to him may be to permit and encourage him to practice against the board. And still a third student may like the effect developed by slicing and cutting his shots rather than by driving. If it becomes apparent that he needs that type of freedom to retain his interest, it should be permitted. True, such a permissive attitude develops some problems for the instructor, but in the long run it may result in better teaching with difficult students. Allowing them to wander around within the activity is certainly better than having them wander away from it completely.

A popular axiom states: *Telling is not teaching; the learner learns by doing if he understands and is interested in what he is doing.* Many experienced teachers evaluate their teaching procedures with this axiom in mind. The first part helps them avoid the fault of talking too much. The second part points out the importance of telling students not only what to do, but how to do it.

Students want instruction, but they want it to be short and simple. *Throw the ball up, and then throw the racket at the ball* may be all that is necessary to say to some students when teaching the serve. And when teaching other strokes, *Reach for the net, Swing from fence to fence, and Swing from the left hip* are useful tips. When simple instructions like these work, there is no need to say or do more.

But as the instructions are reduced to simple terms, enough information must be included for students to learn how to do what they are being told to do. Referring again to the service motion, it may be necessary to teach some students how to throw. It may be necessary to demonstrate and explain: 1) bend the elbow and raise it behind the body to place the racket in the back-scratching position, and 2) then turn the shoulders counterclockwise and point the elbow toward the sideline to start the racket up into the ball. By imitating and following these instructions, these students may learn to throw. Then have them relate the throwing motion to the service motion.

for June, 1978

May We Court You?

We're the largest manufacturer of indoor tennis curtains and outdoor polyester windscreens (with installations in all 50 states). NO ONE can match our experience, quality, service and WARRANTIES.

Outdoor Windscreen
(TENN-AIR)

Indoor Curtains
(TENNA, TENNI)

Court Divider Nets
(with optional patented bottom)

Bumper Pads

Breakaway Safety Ties
(for windscreen)

AND

Gym Floor Covers
Gym Divider Curtains
Gym Wall Pads
Athletic Field Covers

AND

Edwards Nets and Posts
INFORMATION HOTLINE

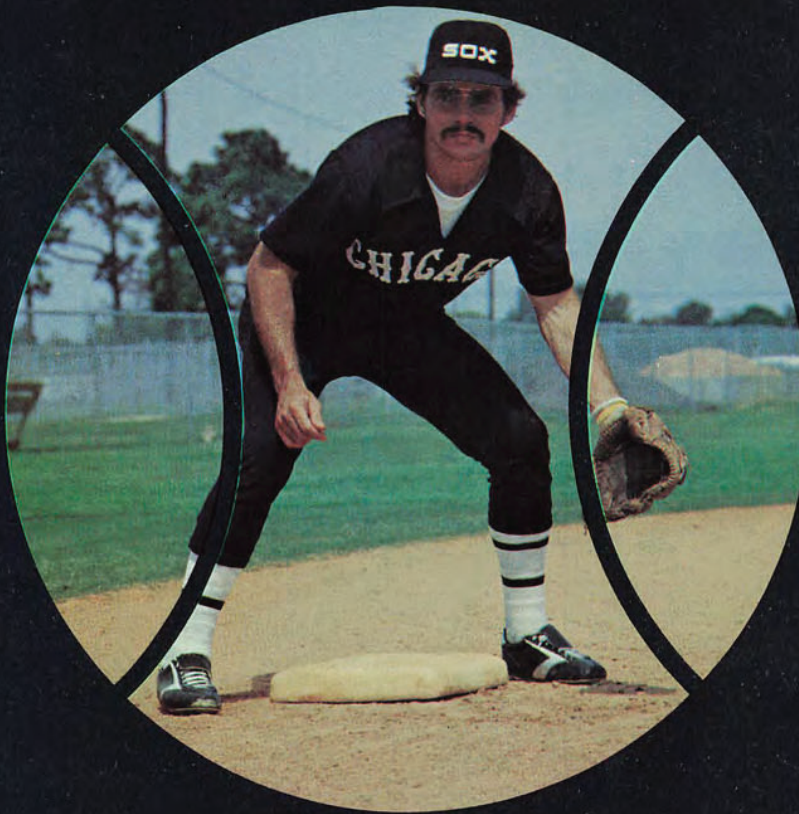
800-621-0146 (Toll FREE)

TENNIS DIVISION



PUTTERMAN & CO.

2221 West 43rd Street
Chicago, Illinois 60609/U.S.A.
312/927-4121



Nautilus and Baseball

For years Baseball players and coaches have feared weight training as support activity for their sport. Perhaps with good cause . . . for improper conditioning technique CAN result in a loss of flexibility.

Proper conditioning has certain requirements: Rotary movement, Direct resistance, Automatically-variable resistance, Balanced resistance, Positive work, Negative work, Stretching, Pre-stretching, Resistance in position of full muscular contraction, and unrestricted speed of movement.

And only Nautilus provides the tool capable of meeting these requirements.

COINCIDENCE?

The 1975-76 World Champion Cincinnati Reds train with Nautilus.

The 1976 American League pennant and 1977 World Champion New York Yankees train with Nautilus.

Eric Soderholm spent eight months at the Nautilus Rehabilitation Clinic in Florida and went on to win the 1977 UPI and Baseball Sporting News "Comeback Player of the Year" Award and the Babe Didrikson Zaharias Award.

Steve Carlton, recipient of the 1977 National League Cy Young Award and National League Pitcher of the Year Award, trains with Nautilus.

and . . . 11 of the 18 recipients of the 1977 Golden Glove Award train with Nautilus.

The leaders in professional baseball have recognized the value of a scientifically based conditioning program and have placed their confidence in Nautilus, the professionals in sports medicine.



Nautilus SPORTS/MEDICAL INDUSTRIES

P.O. Box 1783 ■ DeLand, Florida 32720 ■ Telephone (904) 228-2884

The last part of the teaching axiom mentioned previously refers to the ever-present problem of motivation, of making students receptive and responsive, making them want to learn.

One way to increase students' motivation is to provide proper reinforcement for their efforts. In tennis the most obvious and frequent application of reinforcement occurs when the teacher or coach makes favorable comments after a player strokes a ball with acceptable form. The remarks are satisfying to him, and he tries to repeat the stroke pattern which brought that satisfaction. By continued reinforcement and practice, the instructor hopes to shape his strokes.

In the process of shaping tennis strokes, first reinforce any part of the stroke that even approximates good form. Do not expect instant duplication of the form that is demonstrated or provided as a model even from the most apt students. Instead, anticipate that students will have to be led carefully through several small steps to attain the final step — good form. At each step, make learning tasks simple enough so that reinforcement is within reach of all students.

In the early steps, the form requirements may be as simple as 1) stand sideways, 2) hold the racket firmly or 3) keep the elbow down and the racket on edge. In later steps students may be required to: 1) adjust the swing for high and low balls, 2) adjust the timing when hitting from an open stance or 3) use controlled hand action for force and placement. By changing the requirements at each step, the instructor will be providing learners with practice, instruction and reinforcement at levels appropriate for their abilities.

But using reinforcers is not always a simple matter of offering verbal praise. It may be necessary to apply reinforcement not only for the purpose of improving a student's stroke at a particular time, but also to motivate him toward a proper attitude toward the entire program. For this reason an instructor must consider other types of reinforcers that are available.

Some which can be used effectively can be grouped under the heading of social reinforcers. For some players merely being accepted as a member of a group or team is reinforcement enough to motivate them to respond favorably to the instruction. They are happy to be one of the group, doing whatever the group does, thus attaining the esteem of their peers and winning social recognition. For them this is often the most effective reinforcer.

However, for other students success in competition is a major need. In their case, a succession of bad losses or poor performances can be discouraging and often lead to diminished effort and enthusiasm, sometimes even to withdrawal from the activity. They may need to see evidence of progress, be convinced they are achieving at least some success, measured either against the performance of others or against previous performances of their own.

One way to provide this information is to devise simple tests of skill and form on which students can be scored periodically. Counting the number of balls stroked into a certain court area, the successful hits made against the wall or the number of times a ball is made to cross the net in a rally are examples of such tests. Charts and graphs showing the improved scores on these tests are often enough incentive to make students want to better their scores. Remind students often that these tests are being used as devices to help them reach their goal of becoming tennis players and are not ends in themselves.

Students who improve their scores significantly may be permitted to move from one court, or from one section of the gymnasium to another, where a more advanced skill is being taught. They may also be awarded points at intervals, for accomplishment on each drill, with the points being totaled at longer intervals to determine standings and placement. When they feel satisfied with small steps such as these while not losing sight of the ultimate goal of becoming a skilled player, the instructor makes their problems of training and learning easier and more pleasant.

A teacher can also make various types of material rewards function as reinforcers, especially with very young children. Badges, ribbons, and medals work well for this purpose when offered as prizes for contests. Winners may be rewarded with patches or arm bands with suitable inscriptions such as *Best Forehand*, or *Backboard Rally Champ*. As youngsters mature, however, they attach less value to such material awards and respond more noticeably to social reinforcers. An instructor must consider the levels of development of his students as he looks for appropriate reinforcers.

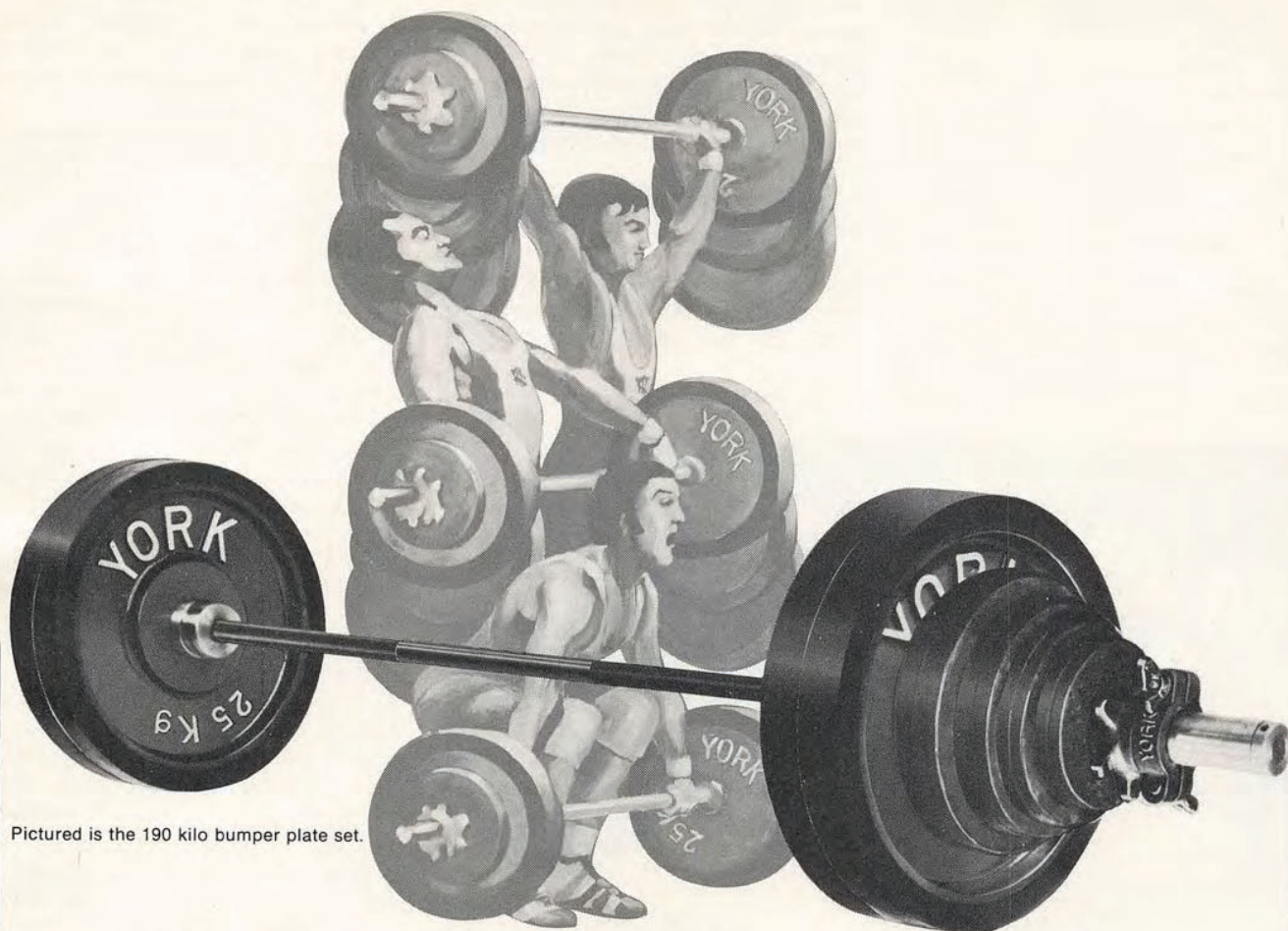
A tennis player has a kind of instant feedback on every shot; he sees that his shot is in or out, high or low, accurate or inaccurate. If the result of a particular swing is a good shot, he tries to make his next swing feel like the previous one, hoping thereby to make another shot.

For some players the satisfactory result and feeling occur often enough to make them want to practice, even without the help of a teacher or coach. But this kind of unassisted trial-and-error learning is not always the most efficient way to learn. The player may not always be able to determine what points of form were incorrect and what caused an error. As a result, good form may come only after many long, arduous practice periods, if it comes at all. Here, the teacher or coach can facilitate learning by explaining when and how errors occur and by suggesting ways to correct them.

It may be helpful to use gimmicks and gadgets to help learners develop a feel for a particular stroke or for some small part of one. Hitting a forehand while pressing a ball can against the body under the upper arm (to learn to keep the elbow down and the racket face on edge) is one example. But a teacher may prefer to rely on the spoken word and attempt to describe and demonstrate proper positions of various parts of the body (the elbow, wrist or shoulders, for example) to help the learner look right when stroking. Hopefully, with continued practice, he will begin to feel what is right. In this way the instructor can use verbal feedback — information not usually available in the performance of a task — to lead the learner to the point where he is able to benefit from internal feedback, i.e., how it feels.

Although verbal feedback is often useful, its limitations for an instructor in group work are obvious. He can attend to only one hitter at a time. True, he usually offers mass instruction first in which he explains and demonstrates for the entire class. Then he disperses his students and arranges for them to rally, presumably with the new form that he recommended. The usual result, however, is that many of them either revert to their old tendencies or they adopt some new technique that seems to work for them. The danger here is that by adopting this bad form that provides temporary success, they may never develop more suitable form that would eventually permit them to play effectively at a higher skill level.

One solution to this problem is to have the students work in pairs and teach them to teach each other. For this plan arrange ball-tossing drills in which half the class tosses while the other half hits. Let hitters swing at balls tossed carefully and accurately so that problems of judgment and timing are minimized. Then they will be able to concentrate on the points of form de-



Pictured is the 190 kilo bumper plate set.

OLYMPIC-INTERNATIONAL AND YORK OLYMPIC BUMPER PLATES

The YORK OLYMPIC-INTERNATIONAL is a sound investment-one that will last a lifetime.

310-pound set-includes the 45-pound high tensile steel bar with revolving sleeves, two 5-pound leather lined collars, two 45, four 25, four 10, four 5 and two 2½ pound plates (does not include bumper plates)

400-pound set-same as 310-pound set plus two additional 45-pound plates (does not include bumper plates)

140-kilo set-includes the bar, collars, and two 20, four 10, four 5, four 2½ and four 1¼ kilo plates (does not include bumper plates)

180-kilo set-same as the 140-kilo set plus two additional 20 kilo plates (does not include bumper plates)

140-kilo set with bumper plates-same as regular 140-kilo set except two 20 kilo bumper plates instead of two 20 kilo non-bumper plates.

190-kilo set with bumper plates-same as the 140-kilo bumper plate set plus two additional 25 kilo bumper plates.

YORK BUMPER PLATES are machined to an exact 25 kilos (55-pounds, red with silver lettering) and 20 kilos (44-pounds, blue with silver lettering) and will fit any Olympic-International barbell. The rubber bumper material is guaranteed to remain permanently bonded to the plate.

(Customer pays shipping charges on delivery.)

YORK BARBELL CO. INC., P. O. Box 1707, York, PA 17405

scribed and later repeated by a tosser when he considers it necessary or helpful for a particular hitter. In this way a student is not left unattended, so to speak. Instead he is under constant supervision, always under the watchful eye of either the teacher or another student, both of whom are helping him develop acceptable form. Only when he begins to display such form should he be permitted to rally without supervision.

To make such a so-called buddy system work, it may be necessary to demonstrate the most obvious and com-

mon faults and the corrections for students. As this is being done, begin to encourage tossers to coach their hitters and persuade hitters to consider each tosser as a temporary assistant teacher. For each pair try to provide easily recognized cues and easily understood expressions they can use as they work together.

During stroke practice, the instructor's role is that of an analyst and an informer. Observe the stroke, consider the cause and effect relationships at contact, and then relate the stroke to the flight of the ball. Conclude what

mistakes occurred and what correction is to be made, and pass this information on to the student in as meaningful a way as possible. Explain technically, demonstrate, diagram or initiate. The instructor may even guide the learner's hands and arms.

Each student has a more active role than may be inferred from the preceding paragraphs. One modern learning theory suggests that he functions as an information processing system. He is continually being fed information about his environment, which in tennis we call the conditions of play. One type of information he processes has already been described — the consequence, the result of his stroke after having swung. But the instructions offered to correct that stroke can usually be applied to a subsequent stroke that occurs under the same conditions.

Now, identical conditions for successive groundstrokes are not likely to occur. Instead, the next shot, the next ball a hitter has to play, is likely to be higher or lower, faster or slower, shorter or deeper than the previous one. Therefore, he must make a judgment that will enable him to set the variables in the stroke (the slant and angle of the racket; the plane, line and force of the swing) properly for that second stroke. This suggests that the teacher should not only help students groove their swings, but he should also help them develop skill in adjusting their swings to the varying conditions of play.

This means, of course, that students must learn to recognize how play conditions change. They must be aware that they are farther from the net, or will be, for this shot than for the preceding one, or that this ball is higher, or will be, than the previous one. By learning to anticipate the conditions under which they are going to have to hit the oncoming ball, they are more likely to set the variables properly for that particular shot.

Here, it may be necessary to direct students' attention to the conditions they must attend to for accurate judgment of the flight of the ball. Many beginners do not know what cues to look for. They must be taught to recognize the force of the opponent's swing, the sound of impact, and the trajectory of the oncoming ball. These are the cues that help predict whether they will have to make a play on a high ball or a low one, a fast one or a slow one. Processing such information before making the stroke is equally as important as correcting the information gathered during or after the stroke.

One good way to provide practice in



Mueller's M-untape™

Mueller's new M-untape gives you more 'strapping power' than any other competitive tape. Better than Coach.® Better than Prozone.® Even better than Zonas.®

M-untape. It's un-bleached, un-porous and un-expensive. Ask your Mueller supplier about it or send in the coupon below. We'll send you a free roll to try for yourself.

*Coach & Zonas are registered trademarks of Johnson & Johnson. *Prozone is a registered trademark of Bike.

Mueller

Mueller Chemical Co.
P.O. Box 99
Prairie du Sac, Wisconsin
53378 U.S.A.

Tell me more. And while you're at it, send me a free roll of M-untape to try for myself.

Name _____
School _____
Address _____
City _____ State _____
Zip _____

adjusting the variables in the swing is to have students aim at a target. The cans in which balls are packaged or a racket cover serve well for this purpose. Let players hit from various locations in the court. They will soon learn that it takes a higher as well as a stronger shot to hit the target when stroking from behind the baseline than it does when stroking from close to the service line. To hit higher or lower, they will have to adjust the slant of the racket and the plane of the swing — to hit harder or softer, they will have to hit with more or less force.

In this practice students also recognize that they will have to slant the racket face differently for high and low balls. For example, when hitting a ball at ankle height, the hitting face of the racket must be slanted skyward slightly to hit the ball up and over the net. But when hitting at a shoulder high ball, the racket face may have to be slanted downward slightly to hit the ball down.

After allowing students to hit at a fixed target from various locations, let them hit at alternate targets from the same location. As an example, let them hit from the center mark and aim at either of three targets, one placed at the service line, the second in no man's land, and the third close to the baseline. Here again, they will soon learn that it takes a different slant of the racket and a different amount of force to hit alternatively short and deep. The racket face will also have to be slanted differently.

In this type of practice tell the students to visualize the shot they are trying to make. Tell them to see in their mind's eye the trajectory, the speed, and the direction they want on each shot. For this it may be necessary to demonstrate high and low shots, easy and hard swings and perhaps also, how to hit high or low, easy or hard.

When this type of practice is provided, the instructor will notice that some players with good strokes cannot hit accurately. They may not have learned to adjust the variables in their strokes. Target practice, in which instructions are offered for recognizing and adjusting to the varying conditions of play, will help them become better hitters. Do not overlook this important part of tennis practice. Teach the players how to hit the ball, as well as how to swing at it.

Due to the individual differences described previously, students have different starting points as well as different potentials for learning. It is logical, therefore, to expect different finishing points. The final result, the level of accomplishment for each student, depends on several factors: 1) how good

he wants to be or expects to be, 2) how well the teacher knows the game, 3) how well knowledge is conveyed to him, and 4) how well the instructor motivates him.

Not all students want to become expert players. Many only want to learn to play well enough to enjoy the game as a recreational activity, playing for fun, as they say. With such low levels of aspiration, they are not likely to accomplish much in the program unless the teacher is able to motivate them to increased effort and enthusiasm.

To fully understand what motivates students, the teacher must discover the

types of events they find reinforcing. Several kinds of reinforcers were described in the preceding sections. A teacher must keep these in mind as he plans his instruction.

When deciding whether to insist on a change in form or to permit present form, assess each student's potential for making the change. Students who want to play only social tennis and who are not committed to serious practice and training are not likely to want to, nor are they likely to be able to change certain techniques that seem to be working for

(Concluded on page 62)

To quench their thirst quick, have 'em chew

QUENCH® GUM



The gum Meadowlark chews.

Now, your athletes won't have to wait for halftime to quench their thirst. They can do it during the game with Quench® Gum.

Loaded with dextrose and fast-acting potassium salts, Quench® Gum's tart lemon flavor cuts through that dry, cotton mouth taste and gets those juices flowing again.

Now available in containers of 100, 200 and 400 individually wrapped pieces. Order yours today.

Mueller

Mueller Chemical Co. P.O. Box 99
Prairie du Sac, Wis. 53578

Here's my order for Quench® Gum.

☐ 100 pieces \$3.99 ☐ 200 pieces \$7.49 ☐ 400 pieces \$13.89

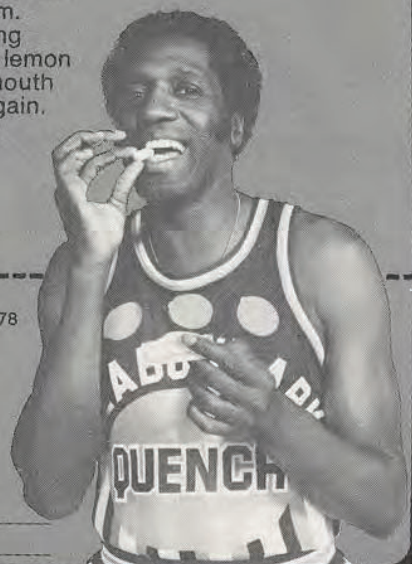
Please add \$1.00 for postage and handling per order.

Name _____

Address _____

School _____

City _____ State _____ Zip _____



1977-78 BASKETBALL

OFFENSE!

By NELSON W. NITCHMAN
Assistant Head of the Department of
Physical Education, U.S. Coast Guard Academy,
New London, Connecticut



THIS season, the application of full-court pressure was adopted by many coaches after scoring via the field goal or free throw routes. It was therefore imperative that every coach devise a suitable method of beating this often disruptive defensive procedure. The most popular and effective full-court press was the 1-2-1-1, yet many teams chose to use the 2-2-1. Most of the more successful teams attacking the full-court press cleared their biggest player to the front court for the possible long pass and quick basket. Characteristically, these same teams always capitalized on the inbounds passer taking over the trailer assignment, a sound tactic for relieving the receivers of the inbounds pass from destructive double teaming. Whether the structure for the penetration was against a 1-3-1, a 3-2, a three-across setup or a triple stack, the initial pass was consistently safe when delivered to a middle player at the free throw area. This initial receiver could assume this position at the outset or could arrive there belatedly after a three-player crossing move which ultimately evolved into a 1-3-1 arrangement.

Several of the best techniques for beating the press are shown in Diagrams 1 through 7.

Most of the top-notch teams supplemented the full-court press with a solid man-for-man and a variety of zones. Against teams with an exceptional scorer, some teams used a box-and-one or diamond-and-one. Seen much more frequently than in the past was the triangle-and-two, which calls for well-organized movement of player and ball by the offense. The triangle-and-two fused nicely with the 2-3 zone and, when coordinated with other defenses, changed the tempo and destroyed some of the aggressiveness of a smoothly functioning offensive unit.

As a front court offense, when confronted with man-for-man defenses, the 2-1-2 set appeared to be the most acceptable arrangement. From the 2-1-2 alignment after a dribbling exchange by the guards, the strongside forward often picked for the second guard handler as the center screened opposite for the weakside forward. Also from a double exchange of ball and players between the guards, the weakside guard and center set many double screens for the weakside forward. The strong guard often passed to the strong forward and then screened away from the ball for the weakside guard, who

worked a guard-around move outside the strong forward. If no play resulted, the feeding strongside forward and center would double screen to the weak side for the weakside forward.

Teams emphasizing longitudinal screens, strong guard for strong forward, prefaced this move by a lateral pass to the weakside guard. The weak guard passed to the strong forward for an over-the-top shot. As an alternate, the strong forward could feed the weakside forward for whom the center had screened opposite inside ball penetration. Other teams using such longitudinal screens by the strong guard for the strong forward likewise shipped the ball to the weak guard, who passed to the high post, who finally passed to the strong guard circling around the strong forward. On plays with the strong guard feeding the strong forward directly, then screening longitudinally inside, the ball was often punched back out to the weakside guard who then hit the strong guard for a shot over the top of the strong forward. Optionally, from this initial thrust the ball was frequently reversed to the weak guard, then to the weak forward for whom the center had screened away from initial ball penetration.

Moves off shuffle action from the 2-1-2 were quite diversified. They included strong guard to strong forward with the strong guard shuffle-cutting off the center. From this, the strong forward dribbled away from the basket, passed to the high post, then set a delayed screen for the shuffle cutter circling back to the strong side. The high post hit the original handler for a shot over the top of the strong forward. The weak side of the defense was activated by an exchange move between the weakside guard and forward.

The normal shuffle move after a lateral pass from guard to guard, with the strong guard feeding the strong forward as the original guard handler cuts off the high post to get a pass from the strong forward, was combined with the strong forward feeding the weakside forward as the center screened away from the ball. An added option called for a reversal of the ball from strong forward to strong guard to the center on the weak side with the strong guard working a buddy play with the center on the weak side. A fourth option, stemming from the identical method of reversing the ball, was exercised by the ball going from strong guard to center, followed by the guards splitting the post on the weak side.

From the same guard-to-guard-to-forward move with the subsequent pass to the shuffle-cutting guard, the center picks and rolls opposite the side of ball penetration and the guard feeds him underneath. Extending this operation, the second guard shuffle-cuts after the original guard cutter and the second cutting guard and center double screen for the weakside forward. Likewise, the strong guard can pass to the strong forward initially and shuffle-cut off the high post, finally setting a diagonal weakside screen for the weakside forward. The ball can be fed to the weakside forward, cutting off the double screen down the middle, or the ball can be reversed to the original handler in the weakside corner. When the defense sloughed to the side of the ball against shuffle movement, it was easy prey for a guard exchange with the strong guard feeding the strong forward, then cutting off the high post. The strong forward hits the post who wheels and feeds the strong guard inside of the slough.

A few teams operated from an overload left with ball movement taking place from strong guard to strong wing to strong corner. After receiving the first pass, the strong wing fed the strong corner and cut for the basket for a return pass or to screen in the weakside corner. The weakside corner player was sometimes fed directly after the diagonal screen by the wing player, but generally the ball was reversed to the exchanging guard who ran a weakside corner play with the left wing cutter after he had screened for the weakside corner attack player.

When equipped with a rugged low post player, several coaches used the 2-2-1 setup, and utilized a guard dribble exchange sequenced by the low post and strong forward working lateral screens with pick and roll principles. They augmented this attack with a guard exchange wherein the original guard ballhandler set a longitudinal screen for the low post flashing high, where he received a pass from the outside guard. Secondly, the outside guard inside screened for the weak forward who posed as the threat of a second scorer if the post player were not freed initially. The double screen by strong guard and strong forward for the low post was another effective method of releasing the high-scoring low post player.

The best 3 in-2 out offense included some longitudinal screens to the side of ball penetration with the center screening away from the ball for the weakside

forward. This movement gave the strong forward the dribble-around on the inside screen, the weak forward an opening off the center's screen and, finally, the center a clear shot over the weak guard's delayed screen. This rotation inside kept these three players where they could be the most productive. The strong guard alternately made diagonal cuts away from the ball after feeding the strong forward with: 1) the center screening for the weakside forward; and 2) in sequence, the diagonally screening strong guard making his second pick in the pattern for the center, if the weak forward cutting over the middle is not freed via the center's screen, not usually the case.

A couple of single stack plays along with a successful 1-3-1 play are outlined in Diagrams 28, 29 and 30.

A number of teams used some 1-2-2 or bottle type zones which were countered by offenses relying on a two-guard front with a three-player inside numerical advantage. Initial movement of the ball between the guards was lateral, as the post player was stationed inside the corner shooters so they could release shots over the top, placing greater pressure on the two deep defenders. As an adjunct to this type of play, one corner player cut closely behind the post player from his corner, then around the opposite corner player as the ball is lateraled and then punched in to the original weak side corner, again burdening the two deep defenders. Another procedure which succeeded was an overload left in which the overload wing player cut to the free throw line, then triangularly to either side of the basket, then flashed back to the high post. This rover design was a medium for outnumbering the rear line by the mere free lance of one player. From the same original overload left, the advance of the ball to the wing on the left was coordinated with the strong corner player flashing high and the weakside corner going baseline. This complicated matters for the two rear defenders by creating openings either at the free throw line or baseline.

From the 1-3-1 set against the 1-2-2, the ball was advanced to either wing as the baseline runner overloaded to the side of ball penetration. The strong wing delivered to the high post as the weakside wing cut under to get a pass for a lay-up.

The best zone teams in this year's competition employed the 2-3 zone. Offensive thrusts from the 2-1-2 set worked best against this type of zone. Either guard feeding the high post with the

OVER 60 BILLION LEAPER®

THE MINI-GYM



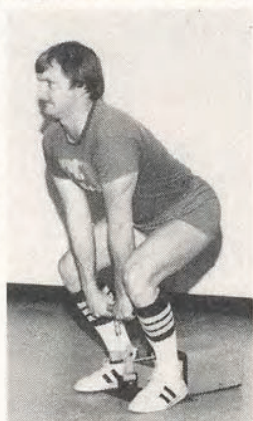
BOB KNIGHT

"My All-America Center, Kent Benson improved his quickness, strength and vertical jump dramatically, using the Mini-Gym Leaper—the finest training tool I've ever seen."

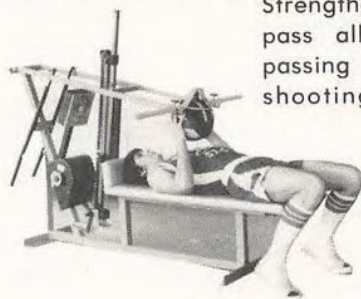
Bob Knight
Indiana University

SUPER-2

The newly designed heavy duty **Mini-Gym Super 2** can easily be removed from the pulldown for floor use. This unit is equipped with larger brake pads and governor arms which allows the athlete to work faster than the small models, yet even the slowest of speeds can be achieved. The **Super 2** gives the same reliability that our **Leaper** and **Power Racks** are noted for.



CHEST PASS-9XB



Strengthening the chest pass allows for greater passing distance, while shooting accuracy improves by simulating the shooting motion. The basketball attachment attaches to any **Mini-Gym Bench Press**.

10,000 SCHOOLS CAN'T BE WRONG

Four years, sixty billion repetitions, and 10,000 schools later, the **Mini-Gym Leaper** is continuing to revolutionize Athletic Strength Training. Through the proven HRFS (High Resistance at Fast Speed) program, explosive leg power and lightning quick reactions are being obtained by high school and college athletes nationwide. Leading researchers agree that the best test for athletic power (force + speed) is one's vertical jump. Increases of 4-10" are being recorded daily by high school and college teams like yours where previous efforts on barbells and weight machines had produced limited results. The **Leaper**, which has been recognized as the top training tool by such basketball coaches as Indiana's Bobby Knight and Arkansas' Eddie Sutton, is also a major part of the programs in such training camps as the American Football Conference Champion Denver Broncos, Big 8 perennial power Nebraska Cornhuskers, the Irish of Notre Dame and the Dallas Cowboys.

Coach, you too can enjoy the success of champions. Isn't it time your school joined the over 10,000 top professional, collegiate, and high school athletic teams that already are using the Leaper?

*if it doesn't say **MINI-GYM...** it isn't a **LEAPER!***

mini-gym, inc.

909 W. Lexington, P.O. Box 266, Independence, Mo. 64051

Call Toll Free... 1-800-821-3126

REPETITIONS

ELECTRONIC
ACCUMULATIVE
DIGITAL
READOUT

Optional on all
Mini-Gym Stations



LEAPER RELIABILITY

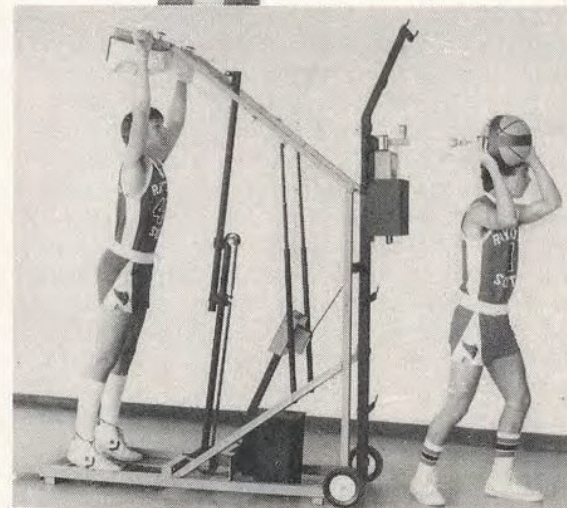
Ten years of constant improvements and modifications have evolved into the present **Leaper** (pictured above). Our highly skilled engineers build in reliability and performance part by part. Then, we test 30 crucial checkpoints for stress and endurance, plus an extensive calibration period to make sure your **Leapers'** first repetition is as solid and smooth as its 100,000th.

Should any questions arise, an answer is as close as your phone. Our toll free number is manned by trained consultants anxious to help you any way possible. With tough competition, decreased budgets, and pressure to win, don't you have enough to worry about besides strength equipment break-downs? **Mini-Gym**, the leader in Isokinetic Strength Training.

16XB
WITH
OPTIONAL
41 PULLDOWN
WITH SUPER-2
EXERCISER



SHOULDER PADS



Military Press

Pulldown used for Passing Exercises.

BASKETBALL CIRCUIT



13X

46

9XB

41

16XB

(In Missouri-1-800-892-3803) Telex 424151 Kansas City area call-836-1300

strong or weakside forward running baseline opened up either the free throw or underneath areas. A lateral ball exchange between the guards with a quick delivery to the high post, terminated by the weakside forward overloading the strong corner, worked nicely. Prefaced by a lateral exchange of the ball between the guards with the high post and weak forward exchanging positions and the strong forward running baseline, this was a simple but solid attacking scheme. As a variance, the ball was shipped laterally by the guards, then from strong guard to strong forward as the weak corner player flashed high and the high post rolled low.

A 3 out-2 in strategy that was successful against the 2-3 zone had the point guard passing to either wing, then breaking to the weakside corner, the weakside corner player flashing to the free throw line to get the second pass in the series from the strong guard while the strong forward ran baseline. The weakside and strongside forwards were immediate, prospective scorers who could realign in opposite corners as the three original outside players regrouped for continuity purposes.

A lopsided right 2-1-2 whereby the point guard hit the overload guard on the right wing, who then passed to the strong forward in the right corner, and lastly with the high post rolling low or clearing to the weak side while the weakside forward flashed high, was a puzzling maneuver for this type of zone to combat as the low post and weakside forward took advantage of vulnerable spots in the defense.

The 1-3-1 offense against the 2-3 zone with low and high posts constantly interchanging proved troublesome to the defense. An added wrinkle showed point passing to the high post to the left wing and back to the point; then to the right wing to the low post running baseline for a shot underneath.

The 2-1-2 offense against the 2-1-2 zone worked well when the guards made a lateral exchange of the ball. The strong guard fed the strong forward as the high post rolled low for an underneath shot.

Against the 1-3-1 zone the same initial moves were made from the 2-1-2 as against the 2-1-2 except that the high post rolled low and took the underneath pass for a shot, or if challenged on the shot, fed the weakside forward driving baseline. To further exploit the 1-3-1 zone, the 1-3-1 offensive set worked the following play: the point guard hit the right wing who fed the overload base-

line runner in the right corner. The baseline runner shoots or feeds the high post rolling low. If challenged, the now low post player dumps down underneath to the weakside forward.

Teams with one consistently prolific scorer found the defense presenting them with a box-and-one or diamond-and-one. Offenses combatted this by lining up in a box arrangement with two post players inside and two good handlers outside. The high scorer lined up opposite either of the two post players and worked to cut off the defender by a series of figure-eight cuts around the two post players. Other clubs overloaded left with the good scorer in the left corner, the teammates in a box. On the lateral exchange, strong guard to weakside guard, the left post player cuts to the free throw line to get a pass for a shot, or feeds the right post who rolls low to get a pass underneath. If neither of these deliveries procure an opening, the right post sets a screen for the high scorer in the left corner. The high scorer gets the ball to drive around the screening right post.

A 3 out-2 in thrust which beat the box-and-one or diamond-and-one purposely isolated the good scorer in the right corner. The point player in the 3 out pumped the ball to the left wing and the right wing cut to the free throw line, and received a pass from the left wing for a shot. In the interim, the good scorer baseline cuts left circling the screen placed on his player by the opposite corner player. The right wing receiving the second pass at the line can shoot, pass to the good scorer over the left corner player's screen or dump the ball under to the left corner player going baseline.

The most ingenious mode of attacking the triangle-and-two required a good shooting point man, two post players on the outside of a double stack, with the two players being played man-for-man on the inside of the stack. These two inside players cut their defenders off by breaking closely around the outside players in the stack to get the ball from the point man. After these two players were freed, one post man flashed high, the other rolled low. The point man shot if the defense sagged, the inside players worked to free themselves for a shot and the post players continued to set up, then break high and low alternately. The two inside players could vary their tactic in meeting the ball by crossing on the baseline prior to cutting their respective defenders off the outside players in the stack.

In a 3 out-2 in attack against the

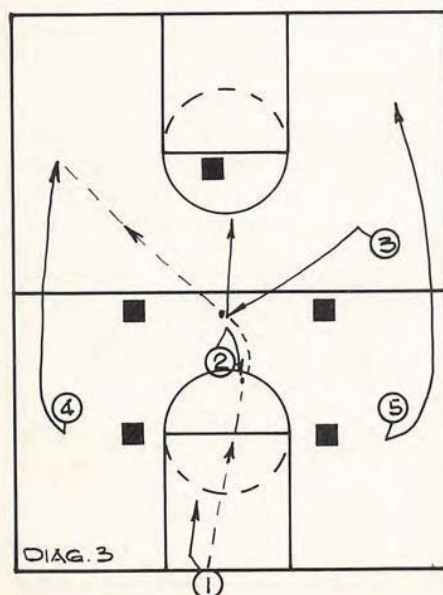
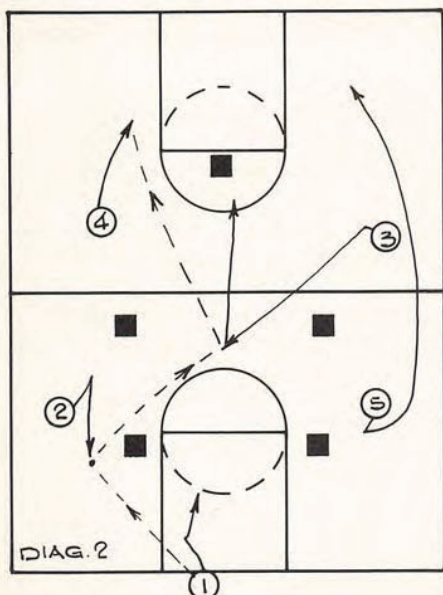
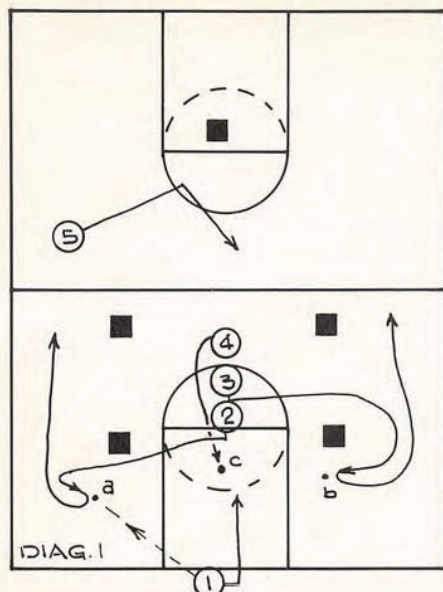
triangle-and-two, the point player shot if the defense retreated. The two players being played man-for-man lined up inside deep and rubbed off their defenders on the longitudinal screens of the two outside wing players. The two screeners crossed laterally when reaching the baseline to give an added scoring medium. The third mode of beating the triangle-and-two was the overload left as the two players being played man-for-man worked outside on a ball exchange. The ball went from strong guard to overload wing left to left corner. The wing, after passing to the corner, cut for the hoop to get a return pass from the corner for a shot. If stymied, he would dump down to the weakside corner player going baseline. The fourth method called for a good point shooter, a triple stack left with one of the two players being played man-for-man deep inside in the stack, the other on the weakside wing. The point man feeds the inside left player cutting out around the double stack for a shot. If this player has no shot, he pulls up short and feeds the weakside forward circling behind him. The outside stack player retreats to the sideline as an outlet if no play shows.

Diagrams 58 and 59 display good sideline out-of-bounds plays. The plays applying to man-for-man defenses are grouped in Diagrams 8 through 30. Those directed against zones are drawn up in Diagrams 31 through 48 and techniques used against unusual defenses (box or diamond-and-one and triangle-and-two) are shown in Diagrams 49 through 57.

In Diagram 1, O1 takes the ball out of bounds while O2, O3 and O4 arrange themselves in a stack at the free throw line. O2 cuts to the left, O3 cuts to the right and O4 comes to the ball from the middle. The inbounds pass can go to any one of the three and after the pass, O1 starts down the middle for the return pass. After either the first or second pass, the ball is advanced to O5 beyond midcourt. O2 and O3 break up the wings, creating a two-on-one or a three-on-one situation.

Diagram 2 shows a 1-2-2 operation against a 2-2-1 full-court press. O1 inbounds the ball to O2 who has faked long and then comes back to meet the ball. O3 breaks from the midcourt spot to the middle to take the pass from O2. When O3 gets the pass, he feeds O4 and then O4, O3 and O5 make the triangular approach to the basket, thus burdening the deep defender with a three-on-one numerical advantage.

In Diagram 3, we have a 1-3-1 opera-



tion against the 2-2-1 full-court press. O1 inbounds the ball to O2 at the top of the key and then trails the ball. O2 then passes to O3 at midcourt as O4 and O5 go down the sideline. O3 whips the ball to O4 and O3, O4, and O5 have a three-on-one advantage over the deep defender.

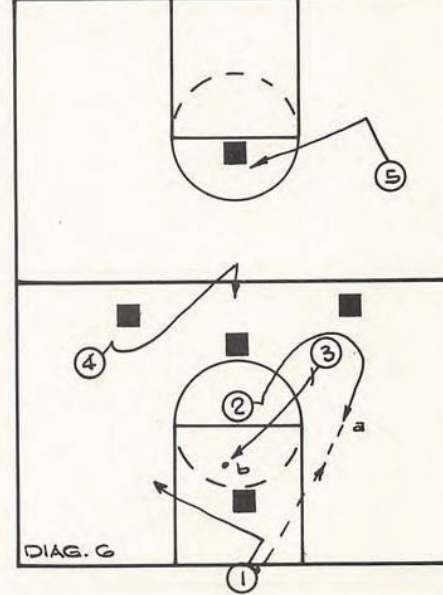
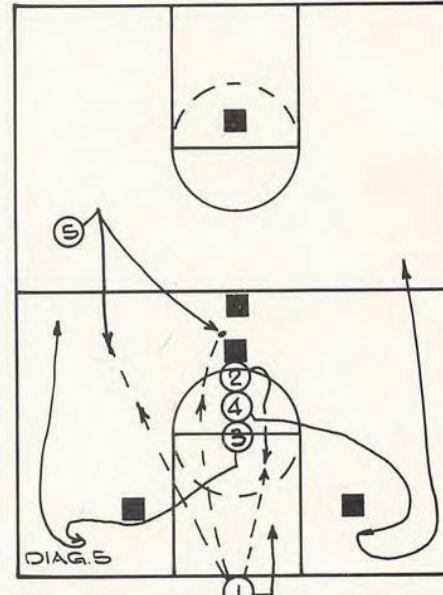
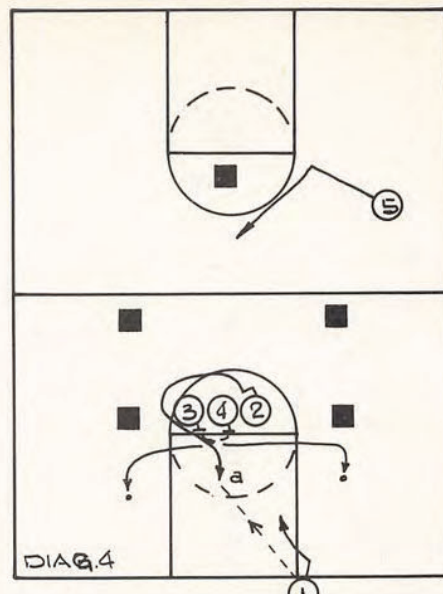
O2, O3 and O4 align themselves laterally while O1 handles the ball from out of bounds (Diagram 4) and the team is now ready to attack the 2-2-1 full-court press being applied by the defense. O2 cuts around the alignment and then breaks down the middle. O3 and O4 cross to the wings and the inbounds pass can go to either O2, O3 or O4 who then look for O5 who has gone front court, then comes back to meet the ball at the middle of the midcourt. On occasions, O4 would break directly from the tandem to meet the ball and in this situation, O2 and O3 would cross to the wings as secondary outlets.

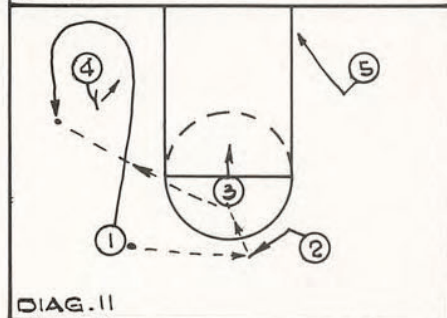
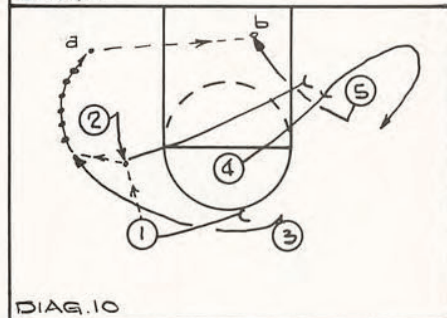
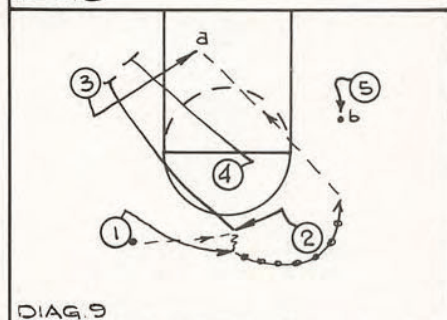
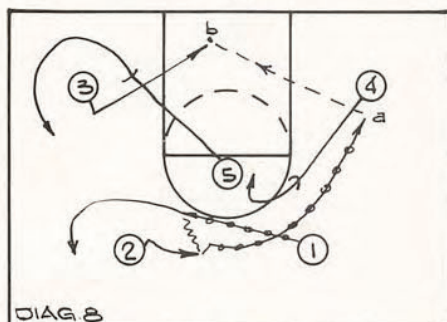
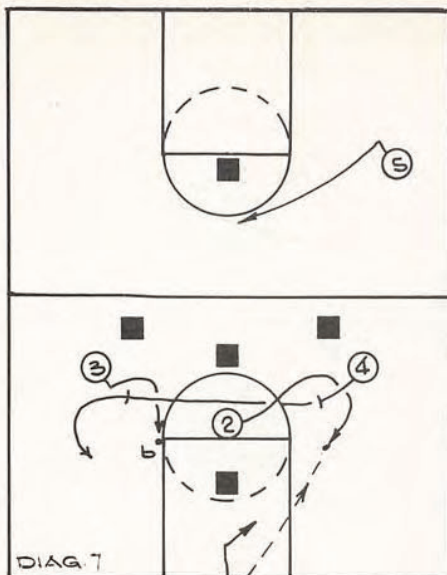
Against a 2-1-1 full-court press, one team operated as shown in Diagram 5. O1 attempted to hit O3 or O4 as they split from the stack. Unable to do so, the inbounds pass went to O2 coming down the middle. If O2 was overplayed, O5 cut to either of the points shown to take the outlet pass. O1 came up the middle after making his initial pass and O3 and O4 went down the wings as the ball reached a point close to or beyond midcourt.

Against a 1-1-2 full-court zone press (Diagram 6), O3 and O4 assumed wing positions. O2, who was stationed at the free throw line, cut around O3 on the right wing. After the screening took place, O3 broke down the middle and O1 fed O2 or O3. The other wing player broke to midcourt. The big center, O5, broke to the free throw area. After inbounding the ball, O1 became a trailer. The passing sequence was from O1 to O2 or O3, to O1 or O4 or O5.

The alignment shown in Diagram 7 is the same as in the previous diagram with the exception that O3 and O4 have switched sides. In this case, O2 and O4 execute the same screen, but O4, instead of meeting the ball down the middle, sets a second screen for O3 who moves up the middle. O1 now has the opportunity to inbounds the ball to O2 on the left wing, O4 on the right wing or O3 in the middle. The passing sequence follows the order described for Diagram 6.

The first of the 2-1-2 maneuvers is shown in Diagram 8. O1 dribbles left on an inside dribbling screen and feeds O2 who dribble drives around O1. O4 moves





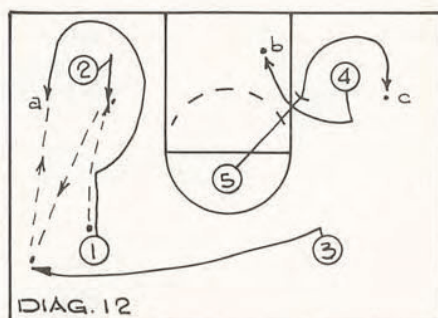
from his inside corner position and sets a screen for O2 who drives around O4 and shoots over the top (a). O5 holds his position momentarily as O2 starts his dribble around O4 and then O5 executes a diagonal screen for the weakside inside player, O3. If O2 does not have a shot, he whips the ball to O3 for the shot (b). When neither O2 nor O3 would be open for the shot, O2 would ship the ball to O4 at the free throw line for the jumper.

Diagram 9 shows an excellent guard exchange maneuver with a double screen away from the ball. O1 passes laterally to O2 in the backcourt and then cuts to the rear of O2 to take the return pass. O2, after returning the ball to O1, sets a diagonal screen for the weakside forward, O3. O1 feeds O3 for a shot over the double screen (a) or alternately feeds O5 and makes a two-man play with O5 (b).

In Diagram 10, the strong guard, O1, passes to the strong forward, O2, and then picks for the weakside guard, O3, who circles around O2 to get a guard around drive for a shot (a). If O3 does not have a shot, he pulls up short and delivers the ball to O5 for whom O2 and the high post player, O4, set a double screen. O5 receives the pass from O2 (b). If there is no chance for either option, the ball is shipped back out to O1 and the continuity resumes.

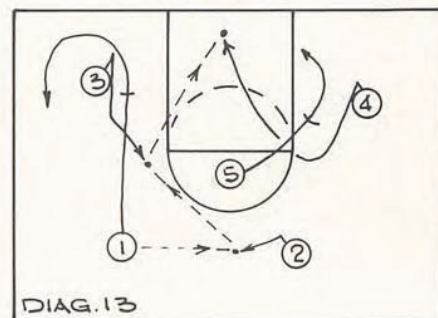
O1 passes laterally to O2 (Diagram 11) and then makes an inside longitudinal screen for O4. O1 ultimately circles around O4. O2 hits O3 in the high post position and then O3 delivers the ball to O1 who shoots over O4's stationary screen. O3, O4 and O5 afford excellent rebounding strength.

Still on the 2-1-2 offense, the strong guard, O1, feeds the strong forward, O2 (Diagram 12). Following the pass, O1 makes an inside longitudinal screen for O2. O3, the weakside guard, moves over to get a punch-out pass from O2. O3 passes back in to O1 who shoots over the top of O2 (a). To activate the defense opposite the ball, the high post player, O5, picks for O4 to whom O3 can pass if



O4 should be open (b). If no play develops to either side, O3 feeds O5 and they execute a two-man weakside play (c).

In Diagram 13, the strong guard, O1, feeds laterally to the weak guard, O2, and then sets an inside longitudinal screen for the strong forward, O3. O2 ships the ball into O3 who can shoot or else feed the weakside forward, O4, who has driven around the high post player, O5's, pick. Notice that the pick is away from the side of ball penetration.



After feeding the strong forward, O2 (Diagram 14), the strong guard, O1, shuffle-cuts off the high post player, O3. O2 looks for O1 on a quick opening but finding none, O2 dribbles away from the basket and pitches the ball into the high post man, O3. After feeding O3, O2 runs a longitudinal inside screen for O1 and O3 feeds O1 for a shot over the top. O4 and O5 activate the weak side by working an exchange.

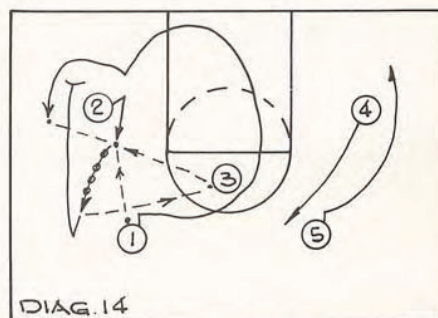
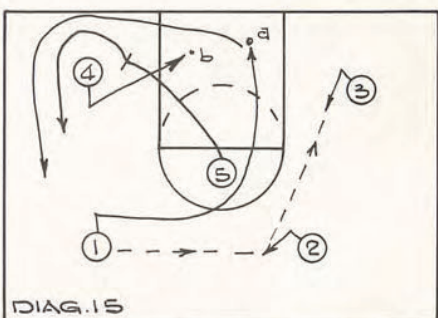


Diagram 15 shows a 2-1-2 shuffle maneuver. O1 laterally feeds O2 who in turn sideline passes to O3 as O1 cuts (Continued on page 48)





GEORGE LEHMANN

("Professional Shooting Instructor" Pro-Keds//Advisory Staff)

"The Toss Back is a serious training device and when used properly produces results. The game today demands quickness and strength. If a player can overload these requirements each day, the player will improve. The Toss Back does it. The machine can be used to breakdown and isolate needed skills and game conditions. The intensity and repetition of Toss Back drills in practice can be designed so hard that game situations are easy to handle."



1 VARSITY MODEL 267.00
2 VARSITY MODELS 488.00

F.O.B. DORRANCE KANSAS
EQUIPMENT FULLY GUARANTEED
16 MM. Color Sound Film Available
Upon Request

MAIL TO:
TOSS BACK INC.
DORRANCE, KANSAS 67634
(TOLL FREE) 800-255-2990

OUTSTANDING
DRILL
BOOKLET
INCLUDED

- ENCOURAGES CONCENTRATION
- DEVELOPS PASSING ACCURACY
- ENFORCES PLAYER REACTION
- SIMULATES GAME CONDITIONS
- GREAT FOR DEVELOPING QUICKNESS



DEVELOPS INTENSITY:

Drills can be timed and tested

REBOUNDING: Toss Back rebound drills simulate the fast action of game conditions. The drills force the big man to constantly **REACT** and create the habit of keeping the ball high.

SHOOTING: Shots can be taken repetitiously off game like passes.

Lefty Driesell
Maryland



"Here at the University of Maryland we use 2 TOSS BACKS in our practices everyday. Our guards, forwards, and centers work with them daily and I think this is one of the finest teaching aids ever invented for the game of basketball."

**SOMETHING TO REMEMBER WHEN
PLANNING A SPRING, SUMMER OR
FALL TRAINING PROGRAM.**

The Toss Back can be used by guards, forwards and centers to work on all the fundamentals that are needed to improve basketball skills. The Toss Back is outstanding in the training of big men; and the flexibility of the equipment allows coaches to program more intense offensive practices, especially in passing, shooting and rebounding, forcing players to constantly react with intensity and concentration. Repetition is one of the best teachers in the game of basketball. Toss Back means

IT'S NEW

The ROYAL MASTER is the latest member of the TOSS BACK basketball family. It is a high quality team model that is guaranteed to withstand group punishment. Coaches can organize a solid team workout using 1 Royal Varsity with 1 or 2 Royal Masters.

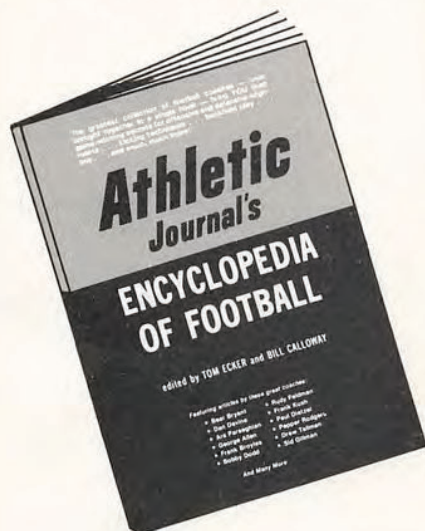


ROYAL MASTER MODEL
\$75.00 --- F.O.B.

Athletic Journal's

ENCYCLOPEDIA OF FOOTBALL

edited by TOM ECKER
and BILL CALLOWAY



Featuring articles by
these great coaches:

- | | |
|------------------|------------------|
| ● Bear Bryant | ● Rudy Feldman |
| ● Dan Devine | ● Frank Kush |
| ● Ara Parseghian | ● Paul Dietzel |
| ● George Allen | ● Pepper Rodgers |
| ● Frank Broyles | ● Drew Tallman |
| ● Bobby Dodd | ● Sid Gillman |

And Many More

49 different articles with 423 diagrams clearly present the football thinking of many great coaches. There is offense, defense, the kicking game, offensive and defensive backfield techniques and strategies as well as finer maneuvers for the offensive and defensive line-men.

\$12.95

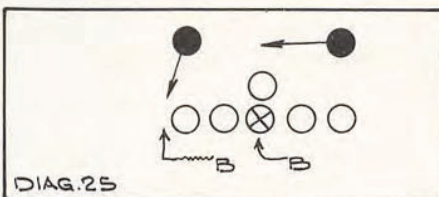
An Instant
Coaching Clinic

ATHLETIC JOURNAL PUBL. CO.,
1719 HOWARD ST., EVANSTON, IL 60202

Pursuit Patterns

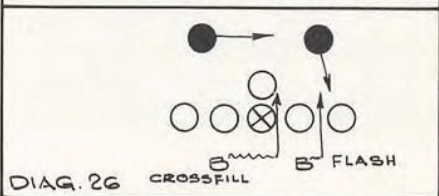
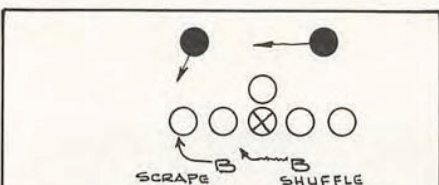
(Continued from page 22)

flash-shuffle pattern by the other line-backer (Diagram 26).

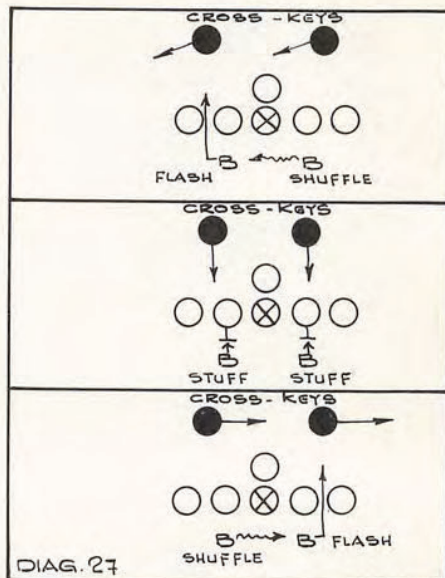


Three phase patterns for both inside linebackers are illustrated in Diagram 27. Both linebackers are in patterns described as flash-stuff-shuffle.

The combinations of inside linebacker pursuit patterns afford almost endless



possibilities in altering a defensive base to prepare for a given offense. **AA**



John Durham is a graduate of Annapolis and served for eleven years as football coach and athletic director at Bradford, Pennsylvania Area High School, where he was successful in converting a losing program into a 64-35-8 record. 1976 marked his first season as head football coach at Keystone Oaks High School.

Training Systems

(Continued from page 16)

system we refer to as *quarter pace fall-off* could be used. While five or six individuals are running 75 second quarters, one runner falls off the pace and jogs or hops in place until the pack is 330 yards or more ahead of him. On command, this runner accelerates to catch the pack, then returns to the 75 second quarter pace until all the runners in the pack have played catch-up at least once.

A third system combining a balance of aerobic and anaerobic work can also be used. We call this system the *two-minute warning*. The runners begin with ten minutes of controlled, steady running. After ten minutes they run for two minutes at a speed somewhat greater than race pace. Next, they run eight minutes, followed by two minutes fast, then six minutes steady, followed by two more fast and so on down the line. When the runners get to two slow and two fast, they work their way back up to the ten minute mark thus completing the training funnel.

In essence, if the cross-country coach builds a wide base of cardiovascular conditioning for the runners to peak upon, it is doubtful that the multi-sport athlete will suffer the ill effects of physiological and psychological staleness that many encounter as a result of trying to do too much too soon. **AA**

References

- DeLoss Dodds, "Middle Distance, Distance, and Cross-Country Running," presented at Iowa State Track Coaches Clinic (January, 1977).
- William Bowerman, *Coaching Track and Field* (Boston, 1974), p. 41.
- Fred Wilt, *Run, Run, Run* (Los Altos, 1964), p. 115.
- Hal Gidgon, "Thoughts from the Coach of Coaches, Arthur Lydiard," *Runners World*, 12:8 (August, 1977).
- Wilt, p. 231
- Kenneth Doherty, *Track and Field Omnibook* (Los Altos, 1976), p. 371

From Here and There

(Continued from page 4)

ing from college for the 13 members of Nebraska football staff was 1959 or, looking at it another way, each member has approximately 19 years of coaching experience. **AA**

THE ATHLETIC JOURNAL



Nautilus for Football

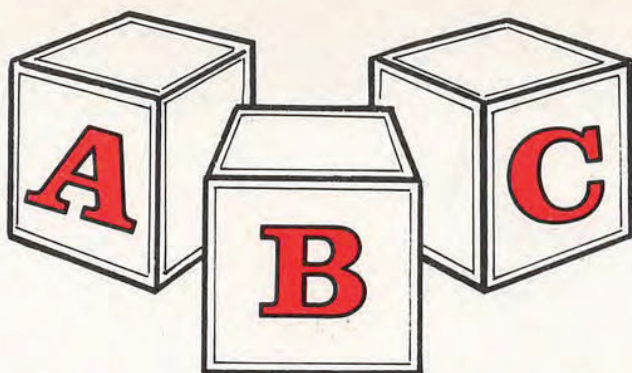
Football players require strength, flexibility, speed, and cardiovascular endurance.

While most of their training time must be devoted to the development and practice of football skills, supplemental strength training is equally important.

Nautilus offers a scientifically based program for the football player which improves his physical capabilities to maximum potential in less than an hour of weekly training. A strong, flexible and well-conditioned athlete is less prone to injury and will outrun, out-throw and outperform his weaker opponent every time.

Nautilus SPORTS/MEDICAL INDUSTRIES

P.O. Box 1783 ■ DeLand, Florida 32720 ■ Telephone (904) 228-2884



BLOCKING

By **ALLEN HEWINS**
Former Assistant Football Coach,
Eastern Montana College,
Billings, Montana



WE are dedicated to the triple option as the basis of our offensive attack. We strive for simplicity and believe that we can defeat any defense with adjustments that we can make on our option play. We have only four complementary running plays, which means we must make all of our plays work against every defense we face. To do this we have had to design a versatile system of blocking schemes for the offensive line that enables them to make adjustments quickly and accurately. Since we are striving for simplicity we wanted to reduce memorization of rules and analysis of formations by the offensive linemen to a minimum. What we chose is a method of block calling we call ABC blocking.

ABC blocking is a zone principle that can be modified to fit any offense. It may seem complicated at first, but the terminology is the only obstacle for the novice lineman. Once he learns it, he can play any position on the line without learning new rules. He has a block call that allows him to be 100 per cent sure of his assignment on every play. This allows him to be more aggressive off the ball because he does not have to think or analyze. Look the system over and try to adapt it to your particular offense. The results will be worth the time and effort.

The Basics of ABC Blocking

When a person reads, he reads from left to right. When we call a block, we designate it in the same manner: A is left; B is straight ahead; and C is right (Diagram 1).

These calls are zone calls and indicate the direction we want the lineman to block. Thus, an A block tells our lineman to block to his left. A B block tells him to go straight ahead, and a C block tells him to block right. There may be some overlapping in our calls. For instance, an A call and a B call may result in the lineman blocking the same player. This results from our rule designating the B block. We do not want to leave a man unblocked, so we enlarge the B area to include anyone shoulder-to-shoulder on an offensive lineman. This is illustrated in Diagram 2.

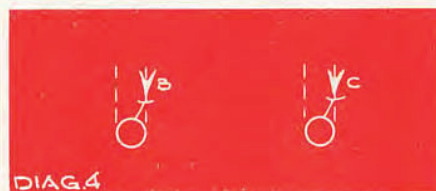


Thus, if a player is on the inside or outside shoulder of a man we will block him with a B call. We may also pick him up on an A or C call. In Diagram 3, the A and B calls will result in the same man being blocked while in Diagram 4, the B and C calls will result in the same man being blocked.

To call our blocks, we give a call for the right side of the line followed by a call for the left side of the line. The call is given in the huddle by the quarter-



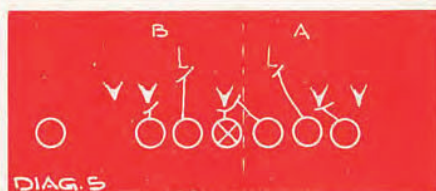
DIAG. 3



DIAG. 4

back if the play and blocking call has been sent in by the coach. Otherwise, the captain of the line will make the call in the huddle. We always call the right side of the line first and the left side second. Our center always blocks the backside call (the side away from the ball). Diagram 5 shows an example of a typical blocking call on a running play to the right side against a 5-2 defense. The call is AB, meaning the right side blocks A and the left side blocks B. Our tight end blocks the call unless it is an option play on which he will release downfield.

Note the double team that results between the center and right guard. We do not call any double team that results in this manner. It is a result of a team call and will only occur at the center-guard junction. Double-team calls at the other places along the line will be discussed later in this article.



DIAG. 5

Remember, the important rules of our call system are: 1) The call indicates a direction and not a man to be blocked; 2) The right side always blocks the first call; 3) The left side always blocks the second call; 4) The center always blocks the backside call.

Individual Calls

The above rules will cover many situations we encounter. However, there are situations in which we need a special technique by one or two linemen that a team call will not give us. To do this we have integrated individual calls into our scheme. Diagram 6 shows how we number our offensive linemen. This allows us to call individual calls by number. Our calls are as follows:

5 3 1 0 2 4 6

DIAG. 6

Red is a double team or co-op block and is used to overpower an opponent or to pick up stunts by two stacked defenders (Diagram 7).



X is a cross block and is performed by two adjacent linemen in an effort to open a horizontal hole along the line for the back to run through (Diagram 8).

Fold is a call where two adjacent linemen perform a block to seal off an outside running lane. The outside lineman comes down the line to perform a shoulder drive on a down lineman with the inside man sliding behind and outside the lineman to seal a linebacker (Diagram 9).



Seal is very similar to the fold except the inside man kicks out on a defender on the line of scrimmage and the outside lineman slides behind the kickout to seal off a linebacker to form an inside

BASEBALL & SOFTBALL PITCHING MACHINES WITH GUARDED THROWING ARMS

WRITE OR CALL
MASTER PITCHING MACHINE, INC.
4200 N.E. BIRMINGHAM ROAD
KANSAS CITY, MO. 64117
PHONE (816) 452-0228

ALL AMERICAN.

NOCONA.

THE ATHLETIC COMPANY WHOSE EQUIPMENT
IS TOTALLY VOID OF FOREIGN MATTER.

Handcrafted with American
materials by our Nocona
people for American sports.

Write for new catalogs,
NOCONA ATHLETIC GOODS CO.
NOCONA, TEXAS 76255

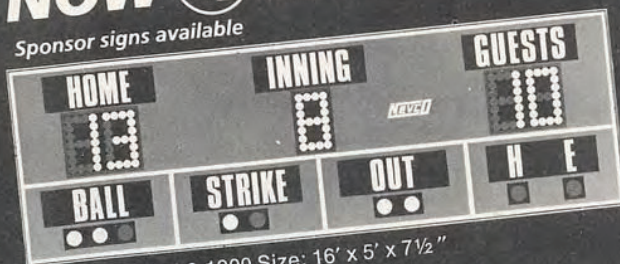


SCOUT **NEVCO** BEFORE YOU BUY

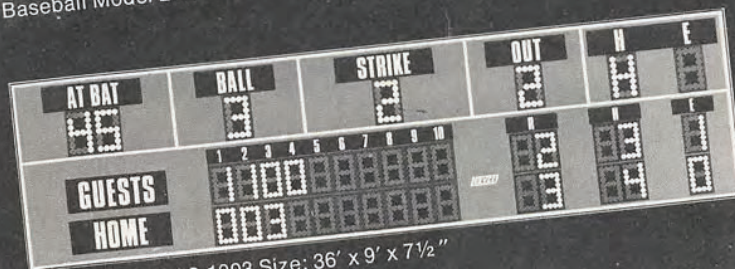
100% SOLID STATE 2-WIRE™ SCOREBOARDS
from a pioneer in 2-WIRE scoreboard controls

NOW **UL** LISTED

Sponsor signs available



Baseball Model 2-1000 Size: 16' x 5' x 7 1/2"



Baseball Model 2-1003 Size: 36' x 9' x 7 1/2"

NEVCO SCOREBOARD COMPANY
215-225 E. Harris Ave. • Greenville, IL 62246 • (618) 664-0360
Western Office: Montclair, CA

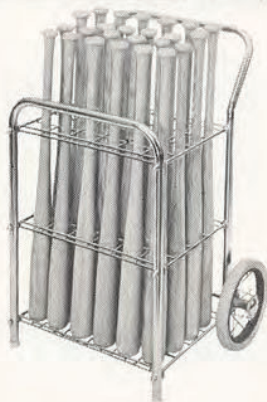
Send information and prices on
scoreboards for

- ☐ basketball
- ☐ football
- ☐ baseball
- ☐ soccer
- ☐ other
- ☐ full color catalog
- ☐ Rush—will purchase in 30 days
- ☐ Sponsor will be purchasing
- ☐ swimming
- ☐ wrestling
- ☐ hockey
- ☐ track

Name _____ ☐ Student
Title _____
School _____
Address _____
City/State/Zip _____
Phone _____

SALES
REPRESENTATIVES
WORLDWIDE

DAKON ATHLETIC EQUIPMENT



MOBILE BAT CART

Fits in car trunk! Holds all bat sizes. Non-rust, triple chrome plated.

MODEL BC 24 (24 BATS)



APPROVED RELAY BATONS

Made to approved standards. Rigid, unbreakable vinyl for safe, sure hand-off. Red, blue, grey and gold colored.

MODEL OAB



PORTABLE BALLRACK

Holds and transports everything from basketballs to medicine balls. Rugged cantilever construction. Heavy-duty chrome plated tubing. Plus reinforced sides & non-mar swivel casters.

MODEL 1000 — 3 TIER
MODEL 1600 SUPER — 4 TIER

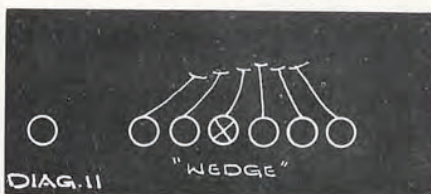
Dakon CORPORATION
1836 GILFORD AVE., NEW HYDE PARK, N. Y. 11040

running lane (Diagram 10).

Wedge is a short yardage team technique where a lineman is designated as an apex man with the rest of the offensive linemen closing in towards him shoulder-to-shoulder to push the line of scrimmage forward at one point (Diagram 11).

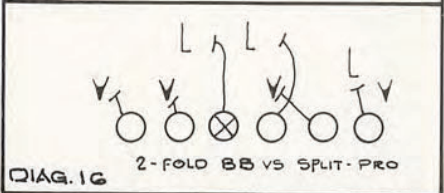
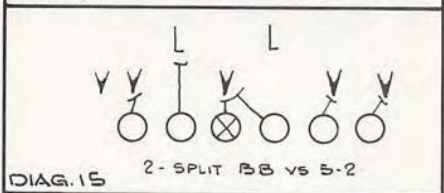
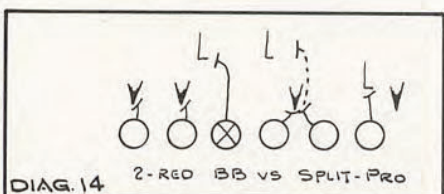
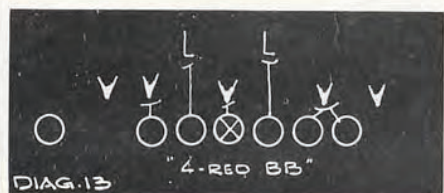


Split is an isolation block used on a lead play to isolate a linebacker for a block by the lead back (Diagram 12).



We call an individual block by designating the lineman by number and the individual call before the team call is given. An example is shown in Diagram 13. The call is 4-red BB and in this case is against a 5-2 defense.

Our four man (right tackle) is called



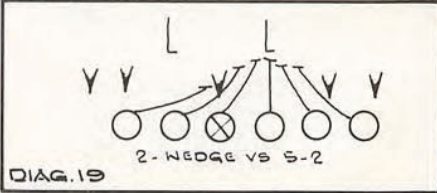
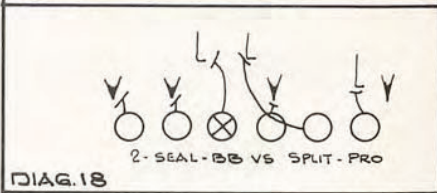
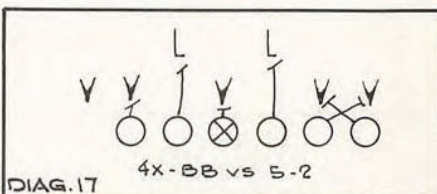
on a double team. The rule states that the individual called always works with the man on his outside. Thus, the tight end knows he will be the other man on the double team. The rest of the line is not involved in the call, so they block the regular team block.

Examples of other individual calls are given in Diagrams 14-19. In all instances the ball will be going to the right side. Diagrams 14, 16 and 18 are against a split pro defense and the calls are: 2-red BB (Diagram 14); 2-fold BB (Diagram 16); and 2-seal BB (Diagram 18). The three odd number diagrams are against a 5-2 defense and the calls are: 2-split BB (Diagram 15); 4X-BB (Diagram 17); and 2-wedge (Diagram 19).

Check-Off System

One problem that occurs with calling the block in the huddle is that a different defense than anticipated will require a check-off at the line. We have simplified our check-off system so that the play-side guard needs only to see where the man over him (on or off the line) is and call accordingly. The calls are as follows: 1) If the defender is in the gap or a 1 technique, call *A* for the playside; 2) If the defender is in a 2 technique, call *B* for the playside; 3) If the defender is in a 3 technique, call *2-red B* for the playside. The backside always blocks *B* when we check off at the line.

ABC blocking has eliminated many problems for us on the offensive line. We can be sure that our linemen know their blocking assignments on each play and they are not burdened with complex analysis of formations or memorization of rules. Our linemen believe in our system and think in terms of ABC blocking rules and this has enabled us to be an aggressive unit. **AM**



Increase Lateral Speed by 33 %!



Throughout the year, every athlete conditions himself for one and only one reason — Superior Performance. He knows that top conditioning will increase speed, agility and aggressiveness while reducing injuries and the time it takes to recover from those injuries.

Until recently, there has not been an excellent system of conditioning the hip muscles to prepare the athlete for superior performance. Hydra-Gym, through Double-Positive Accommodating Resistance, has developed a near-perfect way of exercising and totally conditioning the adductors and abductors that are essential to lateral movement and overall body control. Using the Ab/Ad Hip Machine, team lateral speed average has improved 15% in documented tests with individual performance increasing as much as 33% using athletes in season that were thought to be in top condition before testing began.

Your problems with early-season groin pulls in all sports and slow rehab results will be significantly improved with the Ab/Ad Hip Machine.

Write or call toll-free for more information.

HYDRA-GYM® *Athletics, Inc.*

2121 INDUSTRIAL ROAD
P.O. BOX 599, BELTON, TEXAS 76513

DIAL TOLL FREE 1-800-433-3111
IN TEXAS, DIAL 1-800-792-3013

**the
POWER**
For ALL Seasons

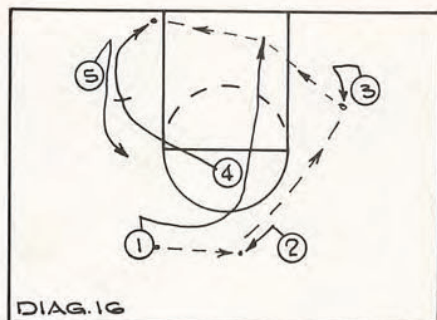
All Power and Powernetic equipment is covered
by Pat. Nos. 3,822,599; D-242,732; 4,066,259 and other patents pending.

1977-'78 Basketball Offense

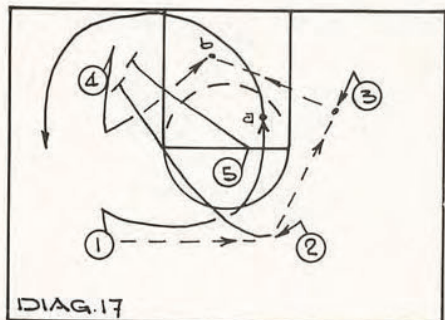
(Continued from page 40)

closely off of O5. O3 passes to O1 if he is open (a). After O1 cuts by O5, he screens opposite the ball for the weakside forward, O4. O3 feeds O4 after he cuts off of O5's screen (b).

Using a shuffle cut (Diagram 16), O1 feeds laterally to O2 and then cuts off the high post player, O4. O2 punches the ball to O3 who in turn hits O1 on his shuffle cut. If O1 is not open for a shot after screening the ball, he looks for O4 who has set a pick and roll away from the ball.

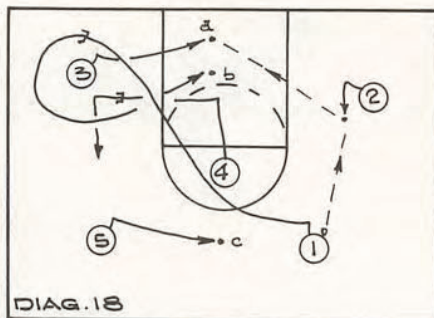


The play shown in Diagram 17 is a double screen for the weak forward run from the 2-1-2 shuffle offense. O1 passes laterally to O2 and then cuts on a shuffle move off the high post player, O5. If O1 were open, O3 would feed him (a). O5 in the meantime, along with the strong guard, O2, set diagonal screens for the weakside forward, O4, who cuts off the double screen to get a pass from O3 for the shot (b).

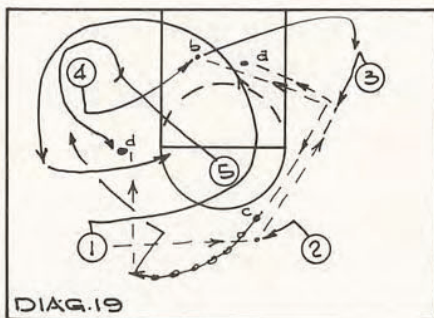


In Diagram 18, O1 feeds O2 in the strongside forward position. O1 screens diagonally for O3 in the weakside front position and O2 passes to O3 for the shot (a). If O3 is not open, he clears and O4 delays briefly and sets a screen for O1 who slips around outside O4 to take the pass from O2 (b). If neither O3 nor O1 are open, O2 passes the ball out to O5 (c).

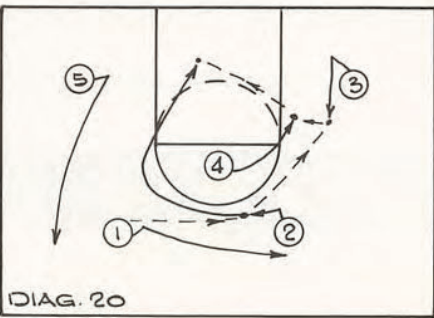
Diagram 19 shows a 2-1-2 shuffle



offense with the reversal of the ball ending up in a weakside split-the-post action. O1 passes laterally to O2 and O2 in turn passes to the strongside forward, O3. O1 cuts off the high post and if he is open, he will receive the ball (a). O5, after O1 clears, picks for the weakside forward, O4, to whom O3 can pass the ball (b). If no play results, O3 passes the ball out to O2 who dribbles to the weak side (c). O5 takes a post position and O2 passes the ball into him. O1, who has completed his circular move, now cuts first off of O5 while O2 makes the secondary cut on the split-the-post action. O5 can feed O2 or O1 (d) or fake the feed and reverse with the ball for a scoring attempt himself.

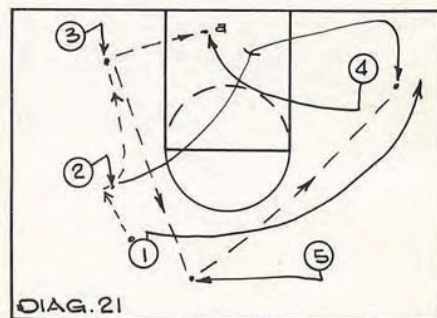


Against a sloughing defense, the play shown in Diagram 20 was consistently good. It involved a lateral exchange by the guards and a longitudinal pass inside with the post rolling low. O1 fed O2 who rapidly fed O3 and then O4. After

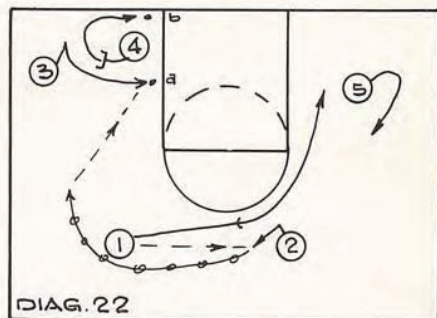


delivering the ball to O3, O2 cut very hard to the weak side to take the pass for a lay-up on the side away from the slough to the ball. O5 cleared and served as an outlet player.

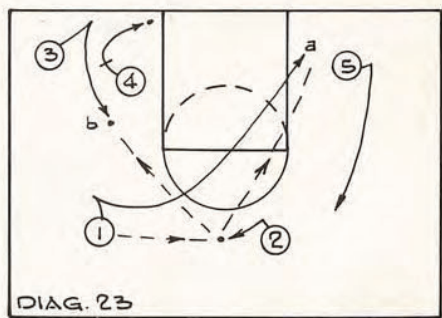
In Diagram 21, O1, O2 and O3 overload the left side. O1 passes to O2, who in turn passes to O3 in the strongside corner. After feeding O3, O2 sets a diagonal pick for the weakside corner player, O4, to whom O3 passes the ball for a shot (a). If no play results from this move, O3 passes the ball back to O5 who has exchanged with O1. O5 now delivers the ball to O2 and O1 and O2 execute a two-man weakside play.



The guards execute a dribble exchange (Diagram 22) and the post player, O4, screens for O3. O3, after cutting around the screen, is fed the ball by O2 for a play underneath. O3 shoots if free (a), or dumps the ball down to O4 on the roll (b).

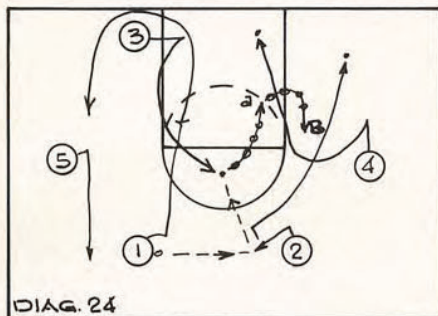


On a lateral ball exchange (Diagram 23), O1 feeds O2 and then cuts diagonally to the basket for a return pass (a). If O1 is not open, the low post

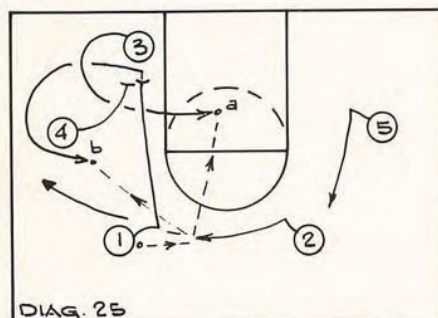


man O4 picks for the weakside forward, O3, and O2 passes to O3 (b). After setting his screen, O4 rolls and if free gets a dump down pass from O3.

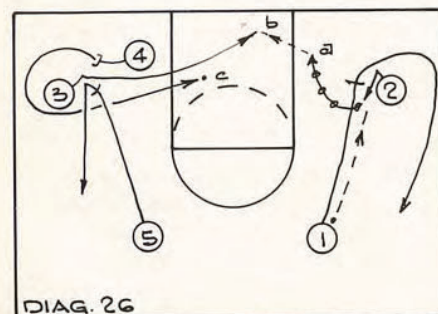
In Diagram 24, the weakside guard screens low for the low post. O1 passes laterally to O2 and then screens deep, longitudinally for the low post man, O3. O2 delivers the ball to O3 for the shot (a) or O3 ceases his dribble and pivots on the opposite medium post position, setting up a split-the-post situation with O4 and O2 scissoring and O3 has the option to feed either cutter (b).



O1 passes to O2 (Diagram 25), and then along with O4, sets a double longitudinal screen for the low post player, O3. O3 circles around the double screen to receive the pass from O2 (a). O3 takes the shot, if possible, and in the event the possibility does not materialize, O1 makes a secondary cut to take the pass (b). O2 then executes a two-man play with O1.



Diagrams 26 and 27 show a 3 in-2 out continuity offense. In the first case, the strong guard O1 punches the ball in to



for June, 1978

Award Ribbons

- Silk satin ribbons for all Athletic and Scholastic competition
- Ribbon imprint includes name of meet, event designation and place
- Ribbons gold stamped on the right color for each event up to 12th place
- All ribbons quality hand crafted
- Fast service, prompt delivery

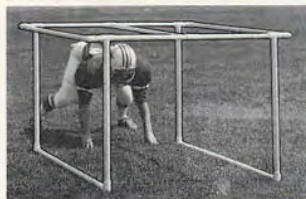


For complete information and prices, write:

rapidribbons

Dept. A. J. Box 222 Goshen, Indiana 46526

POSEY FOOTBALL TRAINING AIDS



POSEY BLOCKING CHUTES

Each Posey Blocking Chute is built from heavy duty 1 1/2" PVC and can be adjusted from 38" to 60" in height. Call or write for new brochure.

#450 Single Chute \$ 54.95

#455 5-Man Chute \$224.95

#457 7-Man Chute \$334.95



#330 POSEY AIR HORN

Posey Air Horns are great for calling in P.E. classes, signaling the end of games, changing practice sessions. New durable plastic design enables you to remove horn from can without leakage. Good for 1000 blasts at 1/4-mile range.

\$19.95

PLACE YOUR ORDER TODAY

POSEY
SPORTS EQUIPMENT

5635 PECK RD. • ARCADIA, CA 91006

TOLL FREE: (800) 423-4292

In California: (213) 443-3143

F3

the new All Aluminum Basketball Backboard

So good it's guaranteed for life! And here's why—

- never needs maintenance
- won't rust, splinter, or shatter
- lively rebound surface like pro boards
- glare-free surface — no holes or protruding hardware
- goal attaches directly to backpost — resists "dunking" damage
- permanent or portable models with single or double posts
- ideal replacement for standard backboards

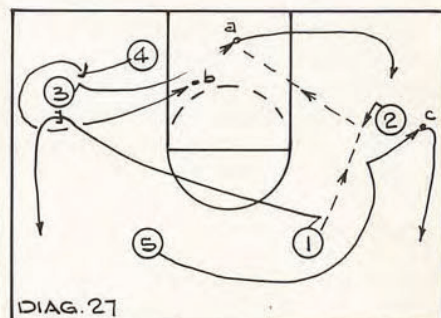
Write for catalogs: Sports, Athletic and Phys. Ed. Products, Playgrounds, and Institutional Above-Ground Swimming Pools.

SportsPlay Products
DIVISION OF PCA INDUSTRIES, INC.
2298 Grissom Drive, St. Louis, Mo. 63141
(314) 567-6277

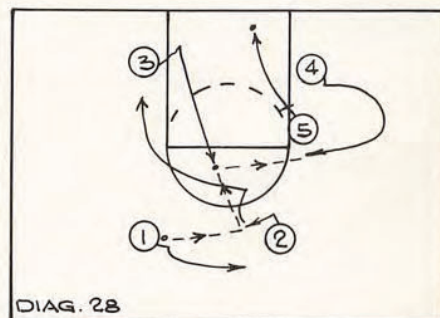
the strong forward, O2, and then sets an inside screen for O2 who drives around the screen for a shot (a). His second option is to feed O3 who has been freed by O4's pick (b). The weakside guard, O5, in the interim sets a longitudinal screen opposite the ball and the post player, O4, whips around the screen for the third option (c). If no play is completed, O1 and O5 retreat to the rear court area and the big men, O2 and O3, exchange sides while O4 moves back into the low post slot.

In Diagram 27, the strong guard, O1, again feeds the strong forward, O2, but this time he cuts diagonally away from the ball. The low post player, O4, picks for the weakside forward, O3, on the opposite side of ball penetration. O2 looks to feed O3 at (a). If O3 is covered, O4 belatedly cuts off of O1's diagonal screen and O2 feeds him at (b). O5, the weakside guard, moves to the outside of O2 to offer a possible third choice (c). If no play results, O1 and O5 retreat while O2 and O3 exchange sides and O4 rolls

low into the post. This operation enables the three big inside players to exchange on these lateral screens. If the defense jams in close to the basket, O1 and O5 are outlets for medium range shots.



The next two plays are run from a single stack formation. In Diagram 28, the stack is to the right and on the guard crossing and the linked diagonal cut to the weak side, the action from the stack is delayed. Guard O1 feeds O2 and follows his pass. Guard O2 punches a diagonal pass to the weakside forward, O3, and then cuts to O3's outside. On the exchange from O2 to O3, O4 times his cut off of O5, getting the pass from O3 and taking the shot over O5. If a switch occurs on this stack move, O5 rolls low and O3 dumps the ball to him underneath the basket.



In Diagram 29, the stack is set to the left and the inside player, O2, cuts around O4 to receive the pass from O1. After O1 feeds O2, O1 sets a diagonal screen for the weakside forward, O3, to whom O2 delivers the ball for a shot (a). If this opportunity is not available, O2 ships the ball out to O5 who sets up a

(Continued on page 53)

National...FOR ALL YOUR INFLATING NEEDS



Electric Inflator

New and easier to use! Air control valve makes inflating jobs easier. Heavy duty, industrial quality diaphragm compressor, 30 lb. pressure gauge and 8 ft. cord with in-line switch. Complete with inflating needle and tapered nozzle for large inflatables. Model #3190.

Ball Gauge

A must for all serious coaches and officials, who realize that accurate inflation ensures constant performance. Calibrated 1-20 lbs. in ½ lb. units. Helps prevent over or under inflation in all balls with standard inflating valve. Complete with pocket clip, extra needle, and a chart of recommended inflation pressures. Model 1971C



Bench Mounted Inflator

The professional quality inflator. Base, top, and handle made of heavy, cast iron for long, dependable service. Complete with 30 lb. pressure gauge, and braided air hose with brass fittings. Extra large clamp allows unit to be used on tables or benches up to three inches thick. Model 3190.

Hand pumps and needles also available. Available from your Team Dealer.

NATIONAL STEELWARES DIVISION

ROOT-LOWELL MANUFACTURING CO., LOWELL, MICH. 49331



for your kickers "a BIBLE"

SECRETS OF KICKING THE FOOTBALL

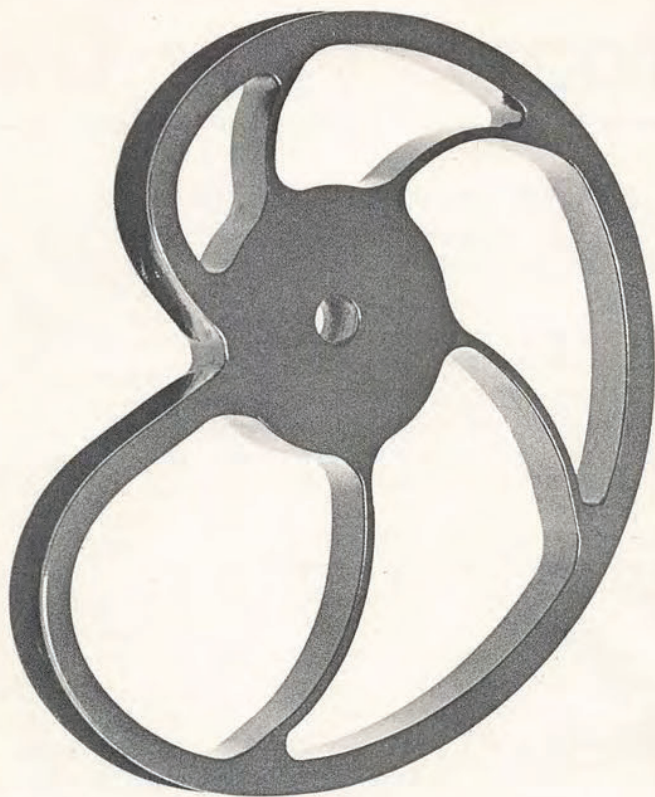
Published by Putnam

Send \$4.95 for postpaid copy to:

DR. EDW. J. STOREY, 4519 W. Tradewinds Ave
Lauderdale by the Sea, Fla. 33308

THE ATHLETIC JOURNAL

THE *Nautilus* CAM



The "heart" of every Nautilus machine is the exclusive Nautilus "cam" . . . the spiral-shaped pulley that automatically and instantly varies the resistance as movement occurs.

When you move, you become stronger—or weaker—depending upon the direction of movement. The Nautilus cam instantly compensates for the resulting change in strength—automatically increasing or reducing the resistance to match your changing strength.

With conventional exercises you are always limited by your strength in the weakest position, thus, you never have enough resistance in the stronger positions.

Nautilus provides correct resistance in every position; lower in your weak positions, higher in your strong positions, and maximum in your strongest positions. Muscular contraction produces torque (rotary force around an axis) . . . and torque is a resultant of two factors: (1) the length of the moment arm (or lever), and (2) the amount of weight (or straight-line force).

If you double the length of the moment arm, then you double the torque, even though the weight remains constant.

In an Nautilus machine, the selected weight can be as much or as little as you require—and the weight remains constant during the exercise. But the Nautilus cam varies the moment arm as movement occurs, thus increasing or reducing the effective resistance—the torque.

Conventional exercises work only "part" of a muscle, but Nautilus works ALL of a muscle.

With conventional exercises you are limited by poorly designed tools. With Nautilus, you have tools that permit you to exercise to the limit of your own potential.

Why limit your results by using exercises that do not provide the requirements of the muscles themselves?

Why not build maximum strength in a minimum of time while greatly increasing the flexibility of your athletes and reducing the danger of injury?

Quite simply, there is NO OTHER METHOD of providing this important requirement for full-range exercise . . . and the cam is exclusive with Nautilus.

Nautilus SPORTS/MEDICAL INDUSTRIES

P.O.Box 1783 ■ DeLand, Florida 32720 ■ Telephone (904) 228-2884

Multiple Pass Coverages From a Four Deep Secondary

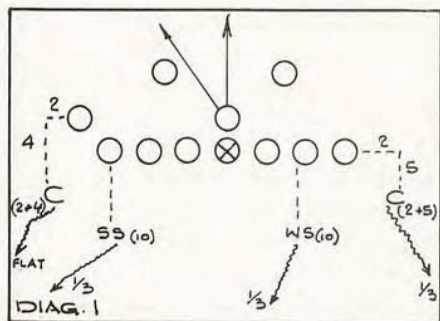
By **BOB ORAVITZ**

Former Head Defensive Coach,
Pennsylvania Rough Riders

In today's highly sophisticated era of offensive football, defense is still the name of the game. As more teams begin to shift and also use motion on the same play, the secondary must be prepared to defend any kind of offensive look at the snap of the ball.

A four-deep secondary is almost a must in defending the multiple offensive sets that are seen today. With four deep, the defense can play a number of different coverages. Adjustments to motion or shifts can be easily handled.

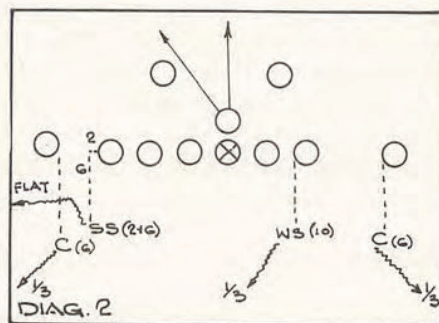
Cover #1 (regular rotation) — corner force — is shown in Diagram 1. Against a tight formation such as a tight slot, wing, power I or full house T, the corner has contain plus flat pass coverage. In the coverage shown in Diagram 1, the quarterback sprints to the defensive left or drops straight back and rotation is then to the left. The left corner covers the short flat, looking for the wing, tight end, or back out of the backfield. He ad-



justs his depth to the receiver in his area. The strong safety covers the deep one-third outside and plays the receiver once he comes into his zone. The weak safety covers the deep middle one-third and he should not allow anyone on the field to get behind him. The right corner covers the deep one-third outside and plays deep enough so that the tight end on a crossing pattern will not get behind him. He should check back for a swing pattern out of the backfield. The offside flat would be covered with either the

defensive end or the inside linebacker depending on the defense called.

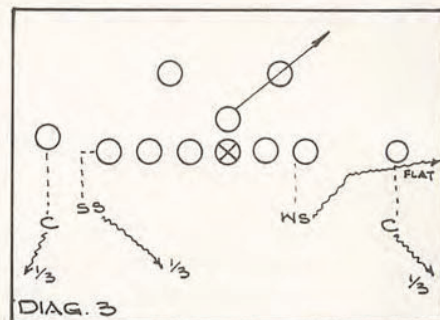
Cover #1 against a pro set — safety force — is shown in Diagram 2. Against a wide out, the corner must go out and play him. If he lines up split ten yards or more, there will be safety support. The corner lines up six yards deep on the inside shoulder of the split wide receiver. The safety will have flat coverage since the corner is out too far to contain. Our corner makes a *sam* call to the safety for safety support. The left corner gives deep one-third coverage to the outside. The strong safety comes up for contain and levels off into the flat once he has read pass. The weak safety offers middle one-third deep coverage, and the right corner gives deep one-third coverage to the outside. Once again, the flat area to the split end side would be covered by the defensive end or inside linebacker depending on the defense called.



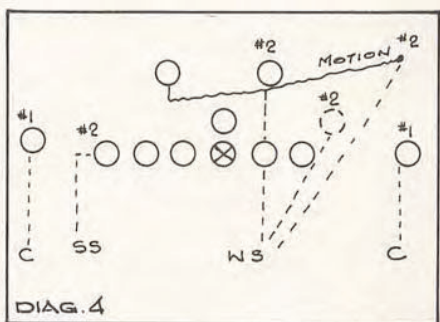
Cover #1 against a sprint to the split end side is shown in Diagram 3. If the sprint or roll of the quarterback is to the split end side, the coverage would be as follows: the right corner — deep one-third outside coverage; the weak safety

checks for the sweep and option, and covers flat area; the strong safety — middle one-third deep coverage; and the left corner — deep one-third outside coverage.

The four-deep secondary can adjust very easily to motion, spreads, or flood formation.



Against a formation with four quick receivers such as that shown in Diagram 4, there are a number of options: 1) The defense can still rotate to a three-deep depending on the movement of the quarterback; 2) The defense can drop off into a four-deep zone coverage; 3) The defense can play all wide receivers man-for-man.



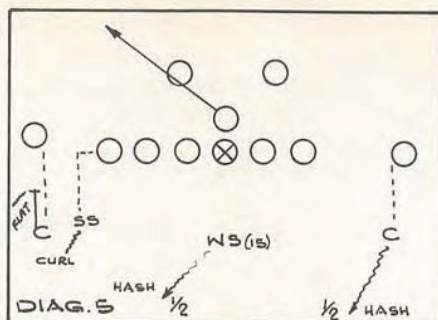
In cover #2, man-for-man coverage, the corners play the widest outside receiver to their side, man-for-man. The safeties play the second receiver from the outside man-for-man. This can be a tight end, slotback, man in motion, or back out of the backfield. If a team goes to a shot gun or removes all backs from the deep backfield set, the defense could go to cover #4, which is a four-deep straight across zone. Underneath will be covered by the linebackers and

In his 15 years of coaching, Bob Oravitz served as head coach at Lourdes High School, Shamokin, Pa., North Schuylkill High School, Ashland, Pa., and head defensive coach of the Pennsylvania Rough Riders, Sunbury, Pa. His record was 87-51-6 and he had eleven winning seasons out of fourteen as a high school coach. Since writing this article, Oravitz was fatally injured in an automobile accident upon returning from a game.

possibly an end.

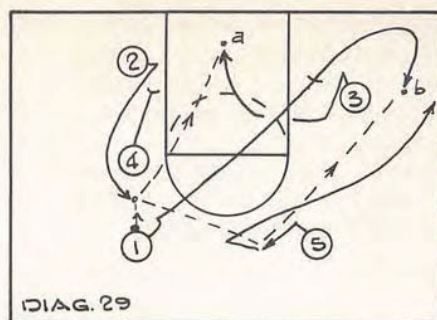
When playing man-for-man coverage, there are a number of options as to how to play the weak safety: 1) He can be assigned the back out of the backfield to the weak side; 2) He can play as a free safety and help out deep in the middle zone; 3) The weakside safety or free safety can double on an outstanding split end; 4) The weakside safety or free safety can be involved in a stunt or safety blitz.

Cover #3 — double contain — is shown in Diagram 5. The newest scheme of coverage involves a two-deep coverage. Originally, this was added to stop the triple option and it was discovered that it had an additional plus in that it confused the read of the quarterback for his pass offense. Double contain means both the corner and the safety have short zone coverage while the other safety and corner rotate to a two-deep, one-half the field coverage. The left corner comes up, jams the flanker and looks for the option (pitch). If he reads pass, he covers the flat area. He looks first for the flanker on a short out; second for the tight end; and third for a back out. The strong safety



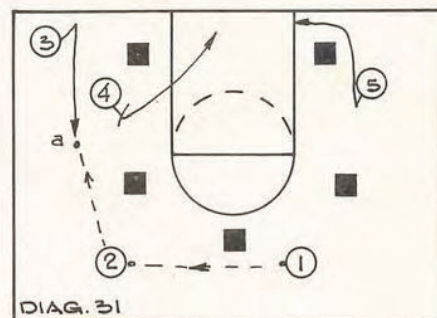
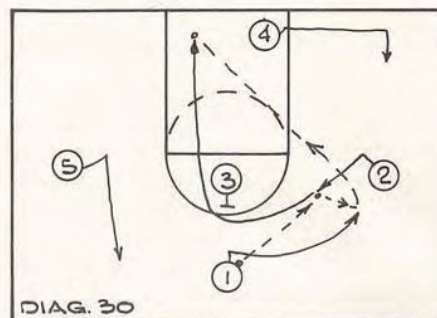
first looks for the option; if he reads pass, he takes away the inside route of the wide receiver and then takes away the dump pass to the tight end, and then he settles in the curl area. The weak safety lines up 13 to 15 yards deep. He covers one-half the field with the right corner. The right corner sprints to the deep one half. He should keep a relative hash distance between himself and the weak safety.

Shifting or motion is not a problem. When the ball is snapped, motion simply creates a new formation as if this man was placed there without motion. The motion man is treated as a slotback or wide receiver, just as if he had lined up in this position when the team broke the huddle. **AM**



a good shooter, cuts off of O4 to receive O2's pass. O3 then shoots over the top and O4 and O5 drive hard for the rebound.

Another team used the play shown in Diagram 32 to attack the 1-2-2 zone. O1



1977-'78 Basketball Offense

(Continued from page 50)

two-man weakside play with O1 (b).

In the 1-3-1 formation (Diagram 30), the point man O1 feeds the right wing, O2, and then follows his pass to get a return pass. O2, after returning the ball to O1, makes a long cut around the high post man, O3. O4 clears and O5 retreats

to offer balance. O1 then returns the ball to O2 on the give-and-go move.

One team used a 2 out-3 in formation to attack the 1-2-2 zone (Diagram 31). O1 makes a lateral pass to O2. O4 has stationed himself in front of the left rear defensive player in the zone. O3, who is

We're a jump ahead of the competition!

AMXCO
AMERICAN EXCELSIOR COMPANY
PRECISION PAK
PRODUCTS

JUMP PITS

Cost less because you buy direct from the manufacturer. Over 30 plants coast-to coast to serve you.

Finest quality foam construction.

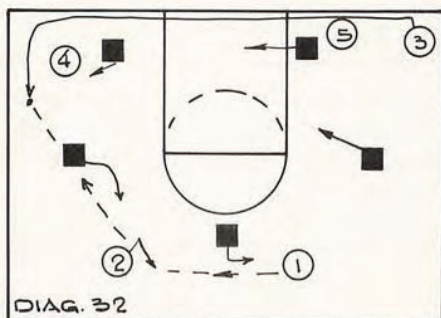
Heavy duty cover of vinyl coated polyester and breathable mesh.

Write or call for complete brochure and our quotation on your specifications.



AMERICAN EXCELSIOR CO. GENERAL OFFICE: P.O. BOX 5067/ARLINGTON, TEXAS 76011/PHONE 817-640-1555

ships the ball laterally to O2 as O3, the weakside forward, goes baseline to the side of the ball for an overload. O4 obscures the rear left defender from covering O3. O3, an excellent jump shooter, takes the pass in the corner and shoots over the top of O4. O4 and O5 handle the rebound duties.



O1 and O2, who are good ball handlers and perimeter shooters, align outside to straddle the front man in the 1-2-2 zone (Diagram 33). O3 is a big, versatile inside player and can overload on either side. O1 passes to O2 who hits O3 at the free throw line and O3 will take the shot if he is open. O4 and O5 are good corner shooters as well as rebounders. On occasions, O3 would line

up low on either side of the lane and would break out to get passes at the foul line. The object of the triangular movement and the across move from the overload was to establish numerical advantage over the two rear line defenders.

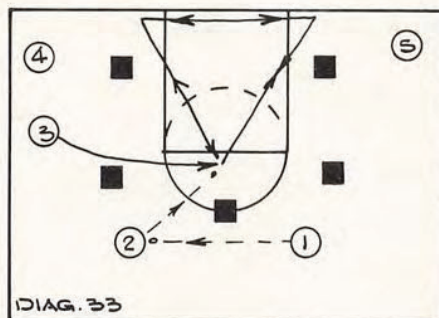
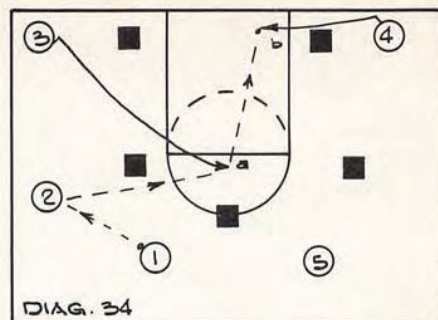
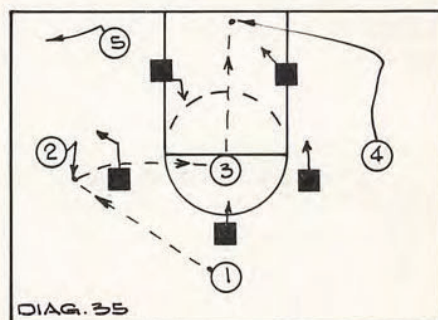


Diagram 34 shows an overload to left as a means of attacking the 1-2-2 zone. O1 feeds the wing player, O2, on the overload side. O3 flashes to the high post and O2 feeds O3 for a shot (a). O4, the weakside corner player, runs baseline and O3 feeds O4 (b) in the event O3 is challenged by either rear defender.

In Diagram 35, the point man, O1, fakes a pass to O4 on the right wing and then hits the left wing, O2. O2 whips the



ball to O3 on the high post. O3 turns and shoots if he is open. Meanwhile, O4, from his weakside wing position, goes baseline and O3 feeds him behind the rear right defender. If the left rear defender moves out on O3, O3 will pass to O5 for a shot underneath.



30th Annual NORTH CAROLINA COACHES ASSN. COACHING SCHOOL

July 24, 25, 26, 27

Memorial Coliseum, Greensboro, N. C.

STAFF

FOOTBALL

Bill Yeoman — Head Coach, Billy Willingham,
Offensive Asst., Barry Sides, Defensive Asst.,
Houston University
Jim Carlen — Defensive football, Head Coach,
University South Carolina
Paul Briggs — Motivation, Head Coach,
Bakersfield, California, High School

BASKETBALL

Bill Foster — Head Coach, asst., Bob Wenzel and
Ray Jones, Duke University
Jeff Mullins — All-Pro NBA. Lecture on Shooting
and Ball Handling

BASEBALL

Ron Polk — Head Coach, Mississippi State
University

TRACK

Frank Costello — University of Maryland

MENTAL TRAINING FOR ATHLETES

Ronald Ronan — Stonybrook, New York

WRESTLING

Mike Frick — National Champion, Lehigh University

TUITION

Pre-Registration \$20
Non members and
out-of-state \$25

TRAINING — EQUIPMENT STUDY AND LIABILITY

Dr. Herb Appenzeller — Guilford College

TENNIS

J. W. Isenhour — North Carolina State University

RULES INTERPRETATION

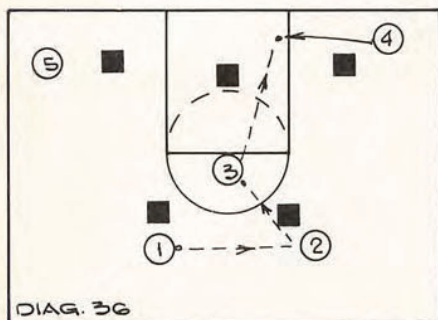
Charles Adams — North Carolina High School Athletic Association

ALL-STAR — BOYS' & GIRLS' BASKETBALL GAME
ALL-STAR — FOOTBALL GAME

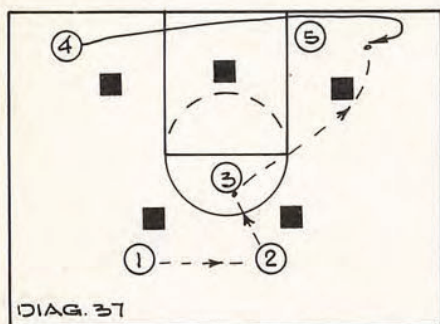
For Further Information Write:

BOB JAMIESON, Director, or Assistant Directors, PHIL WEAVER or
MAC MORRIS, 3125 W. Friendly Ave., Greensboro, N. C. 27408 or
CLAUDE MANZI, Exec. Secretary, 107 Pineburr Rd., Greensboro, N.C.
27408.

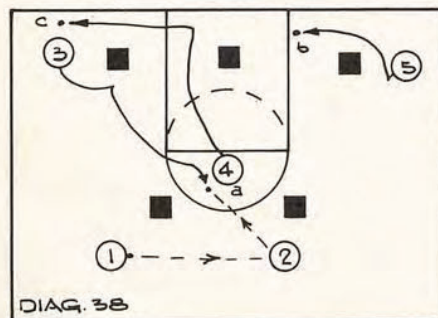
The 2-1-2 attack (Diagram 36) was well handled against the 2-3 zone. O1 passes laterally to O2 who in turn passes to O3 at the high post. If O3 is open, he will take the shot; otherwise, he will hit the strong forward, O4, who is going baseline. This entire maneuver puts considerable pressure on the middle rear defender.



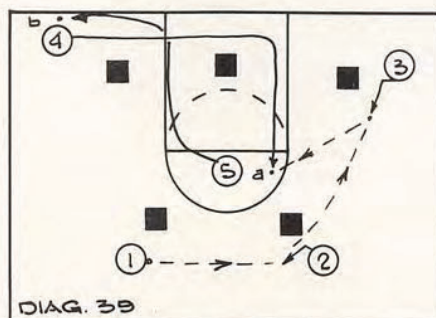
Again in attacking the 2-3 zone (Diagram 37), O1 starts the move by passing to O2 who again hits O3 at the high post. The weakside forward, O4, cuts baseline around the strong forward and takes the pass from O3 for a shot over O5. After the shot, O3 covers the left side and O5 the middle for rebound purposes.



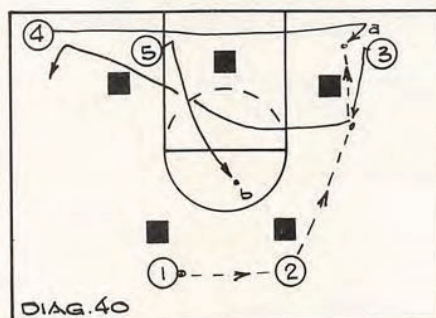
In Diagram 38, O1 and O2 make a lateral exchange outside and while this is taking place O3, the weakside forward, flashes to the high post to receive the pass from O2. O3 shoots (a) or looks for the weakside forward O5 who is going baseline (b) or looks for O4 who has rolled low and then moved to the corner (c).



A move against the 2-3 zone from the 2-1-2 offensive set is shown in Diagram 39. O1 makes a lateral ball exchange to O2 who immediately passes in to the strongside forward, O3. The weakside forward, O4, runs baseline and then flashes to the high post position where he takes the pass from O3. If he is open, O4 takes the shot (a) or else looks for O5 who has moved over to occupy the free corner (b).

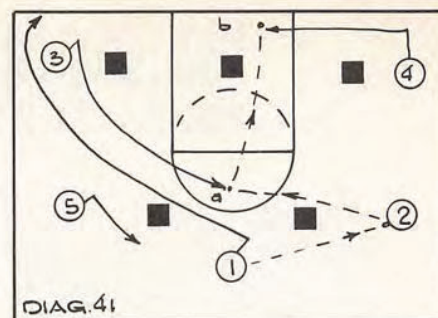


From a 3 in-2 out set, one team had repeated success against the 2-3 zone (Diagram 40). O1 passes to O2 who feeds O3 moving out from the strong corner. The weakside forward, O4, overloads in the corner vacated by O3 and O3 feeds O4 for the shot (a). If slides by the defense negate the pass to O4, O5 cuts high from the low post position and O3 feeds O5 for the shot (b).

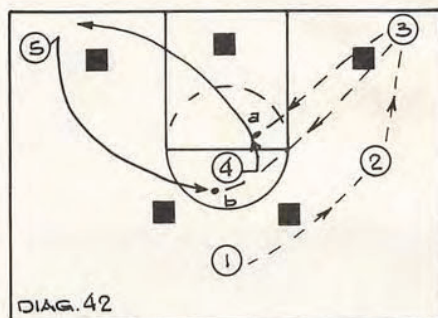


In Diagram 41, a 3 out-2 in move against the 2-3 zone is shown. O1 at the point feeds O2 and then O1 cuts diagonally away from his pass and replaces O3 who cuts to take the pass from O2. In the meantime, the strongside forward, O4, delays and runs the baseline. O3 can shoot from the free throw line (a) or feed O4 underneath (b). This places a heavy burden on the middle rear defensive player. O5 now assumes the point and if no play results, O3 and O4 exchange corners. O1 clears to an outside wing and play commences again.

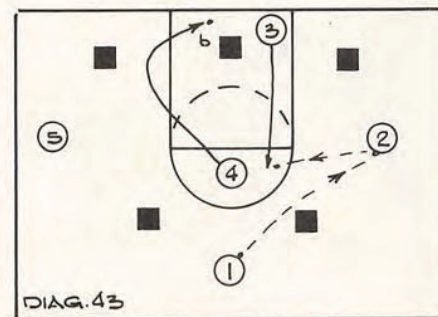
One team used a strongside overload with a high post and weakside forward rotation to combat the 2-3 zone



(Diagram 42). O2 and O3 overload to the right and O1 assumes the point with the ball. O1 passes to O2 who can shoot or feed O3 in the corner. O3 then can shoot if he is open. If the defense slides to cover O2 and O3, the high post player, O4, starts his roll low and gets a quick pass from O3 (a). If such a play cannot be made, the weakside forward, O5, flashes high to receive from O3 for the shot (b). The rotation can be directed alternately to either the left or right.



The next three diagrams are 1-3-1 offensive moves against the 2-3 zone. In Diagram 43, the point player, O1, hits the right wing, O2. The low post man, O3, flashes high and the high post man, O4, rolls low. O2 hits O3 who shoots (a) or else dumps the ball down to O4 rolling low (b).



In Diagram 44, the opening pass again goes to O2 while O4 rolls low and O3, the baseline player, flashes high. O2 hits O3 at the high post and O3 takes the shot if open (a). If the rear middle defender challenges O3, O3 will dump the ball inside to O4 (b).

BLEACHERS

BY MEDALIST STANDARD STEEL



PORTABLE



PERMANENT

No project is too small or too large for the Bleacher manufacturer with more than two decades in the business.

Experience, professional engineering and modernized production facilities assures • **QUALITY • SAFETY • COMFORT • AND LONG TERM ECONOMY** — the features which should be sought when considering bleachers.

May we offer our professional services as you plan your seating requirement?

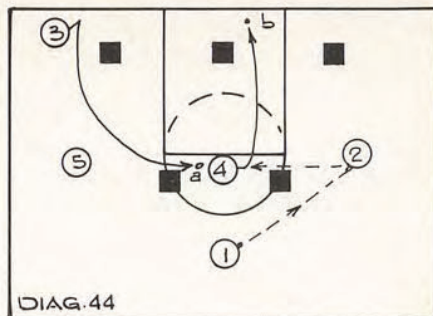
Medalist Standard Steel

(616) 279-5211

Division of Medalist Industries, Inc.

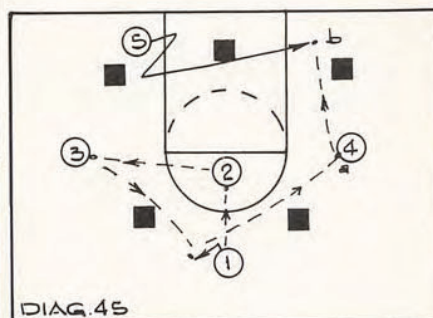
420—14TH STREET

THREE RIVERS, MICHIGAN 49093



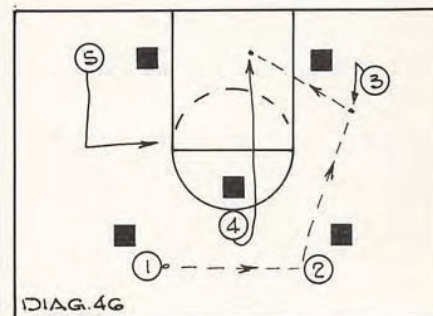
DIAG. 44

In Diagram 45, O1, from his point position, hits the high post player, O2, who rapidly delivers the ball to O3 on the left wing. O3 promptly ships the ball back to the point who hits O4 for a shot from the weakside wing spot (a). If O4 is challenged, he looks for O5 running baseline to the side of the ball. O4 feeds O5 for an underneath shot (b). If no play resulted, the ball would be shipped back out and reversed to O3 for a weakside shot. O5 would still go baseline to the side of the ball.



DIAG. 45

A 2-1-2 offensive move against the 2-1-2 zone is shown in Diagram 46. O1 starts the action by passing laterally to O2 who in turn makes a sideline pass to the strongside forward, O3. O4 rolls low and O3 feeds O4 for an underneath shot. If the middle player in the zone retreats, O3 whips the ball to O5 flashing high. O5 shoots if he is open and O4 and O3 provide rebounding strength.



DIAG. 46

Against a 1-3-1 zone (Diagram 47), the guards position themselves so that they are straddling the point defender. O1 feeds O2 and O3 comes out to meet the

THE ATHLETIC JOURNAL

STOP WATCH FACTS

Minerva CAN OFFER

- **NEW UNCONDITIONALLY GUARANTEED COIL SPRINGS!** Put an end to wear, friction, resulting in annoying failures... the only stop watch with a non-breakable coil-spring.
- **INDEPENDENT HAMMER SPRING** gives perfect flyback to zero on every "Button on Side" time out unit—guaranteed for life! Featured in our **HEAVY DUTY** Football, Basketball and Track models.
- **ACCURACY CERTIFIED BY OUR WESTERN ELECTRIC ELECTRONIC TIMER.**

We are headquarters for
STOP WATCH REPAIRS & SERVICING
All makes—prompt service

Write today for new catalog AJ-678
showing over 50 models

M. DUCOMMUN CO.
Specialists in Timing Instruments
78 Main St., Warwick, N.Y. 10990 • (914) 986-5757

RIP FLAG®

The Original
Flag Football
Belt &
Flag Set

... used in boys' and girls' physical fitness, recreation and flag football programs... by schools, camps, park districts and armed services.



**Standard
Rip Flag
Belt &
Flag Set**

Pat. No.
3-063-718

Belt adjusts
for all waist
sizes. Flags are
the same as
standard set.

Three belt
sizes. Six
brilliant flag
colors.



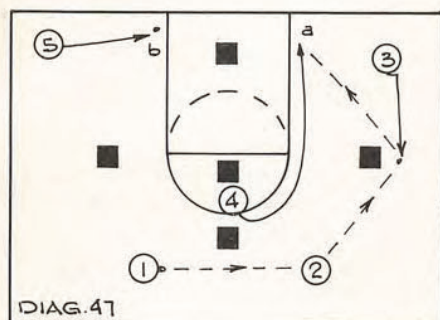
**New
Universal
Rip Flag
Belt &
Flag Set**

RIP FLAGS ARE FULLY GUARANTEED.
Tough nylon coated flags are good for over 100,000 pulls. Accept no imitations — our name is on the belt. Approved for government purchase. Prompt shipment. Jobber and dealer areas open. Phone 515/423-7745.

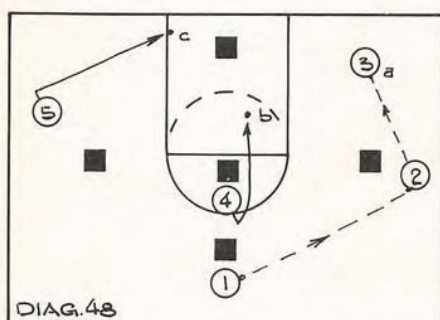
MASON CITY TENT & AWNING CO.
406-08 So. Federal Ave., Mason City, Ia. 50401

• Rip Flags • Uniform Belts • Duffel Bags

pass from O2. On the pass from O2, the high post player, O4, rolls low and O3 hits him and he takes the shot if he is open (a). If the rear defender slides to cover O4, he looks for the baseline move of the weakside forward, O5, and feeds him underneath (b).



One team used the 1-3-1 overload right to attack the 1-3-1 zone (Diagram 48). O2 and O3 overload the right side and O1's initial pass is to O2 who promptly passes to O3. O3 shoots if he is open (a). O4 rolls low for a pass from O3 if the baseline defender covers the corner (b). If the defense slides to cover O4 with the middle or rear court defensive players, O4 will dump the ball to O5 going baseline (c).



The next three moves shown in Diagrams 49-51 are against the box-and-one. In Diagram 49, the offense lines up in a box alignment with the big post players, O4 and O5, in the double low post spots. The other two players line up as the outside men and O3, who is being played man-for-man, starts from the right inside wing. O1 and O2 execute a ball exchange and O3 cuts his man off of O4 for a pass underneath and the shot (a). If he is not free, he circles in front of the other low post player and gets a pass (b). The outside players continue exchanging the ball and sides as the player who is being played man-for-man keeps operating in figure-eight style around the low post men. The low post men exchanged sides frequently and were also open for numerous free shots.

for June, 1978

SPORT GRADUATE STUDY THIS SUMMER

SPORT RESEARCH
SPORT MEDICINE

SPORT COACHING



SPORT BEHAVIOR
SPORT MANAGEMENT

AN OUTSTANDING FACULTY OF SPORT PROFESSIONALS

Dr. Herb Appenzeller, Sport Law; Dr. Vivian Barfield, Contemporary Sport Problems; Dee Glueck, Sport Facilities; Dr. Robert Bronzan, Sport Marketing; Dr. A. W. Faris, Sport Physiology; Hal Fischer, Basketball; Dr. David Geiger, Sport Facilities; Dr. William Gilley, Sport Research; C. M. Newton, Basketball; Homer Rice, Business and Personnel Management; Jack Rockwell, Sport Medicine; Pepper Rodgers, Football; Al Scates, Volleyball; Robert Shaw, Football; Dr. Frank Spechalske, Sport Management; Dr. Thomas Tutko, Sport Psychology; Armondo Vega, Gymnastics; Dr. Leroy Walker, Track and Field.

COURSE

START DATE

Sport Law	June 12
Men's Gymnastics	June 12
Sport Medicine I	June 12
Sport Physiology	June 12
Football Coaching	June 12
Basketball Coaching	June 12
Sport Management	June 12
Track and Field Coaching	June 19
Sport Facilities	June 26
Sport Marketing	June 26
Sport Medicine II	July 10
Sport Biomechanics	July 10
Introduction to Sport Research	July 10
Business and Personnel Management	July 10
Volleyball Coaching	July 31
Sport Psychology	August 7
Contemporary Sport Problems	August 7

The United States Sports Academy is a non-profit graduate institute dedicated to excellence in sport through education, research, and service. Affiliated with the University of South Alabama, the Academy is located on the University campus in Mobile.

UNITED STATES SPORTS ACADEMY
University of South Alabama
307 University Blvd.
Mobile, AL 36688
(205) 460-7000

Please send information and registration forms for the USSA's summer graduate courses in sport.

Name Title

Address

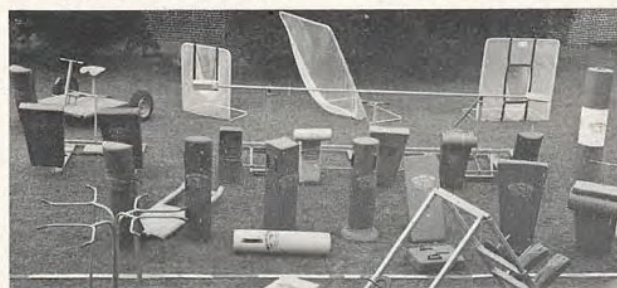
City State Zip

()
Telephone

IF IT'S FROM WORLD... IT'S A WINNER!

For all your training equipment needs, check with World for the best in quality, price and service. "100% satisfaction guaranteed."

Write for free catalog or use our Toll Free Number (1-800-633-1270) for more information and rush orders.



WORLD
SPORTING GOODS, INC.
1306 St. Stephens Road, Mobile, Alabama 36603

A FIRST FROM WORLD!
2 Year Warranty on Blocking Sleds!

new items of interest

For further information see Buyer's Guide page 63



AN ideal outfit for several women's sports, this Lady Fox Byron uniform combination from Lady Fox is attractive in any game. The Byron collar, which contrasts nicely with the total uniform color, sets the style for the shirt with other features including a stretch V-neck and split tail design. The Lady Byron short coordinates perfectly, offering a two-inch contrast, self-material waistband with drawstring, a three-inch inseam and one-inch braid down the sides. Capital Industries, P.O. Box 689, DeSoto, TX 75115.

HEAVYWEIGHTS as well as 98-pounders can work their maximums without making a single adjustment on this unique exerciser. The "Grappler" is specifically designed to develop the speed, quickness and explosiveness the wrestler uses in executing the take-down. The movement of pulling the resistance inward allows the user to do a series of 20 to 35 repetitions of approximately one second each, developing extreme power and strength in the arms and legs. Mini-Gym, Inc., P.O. Box 266, Independence, MO 64050.

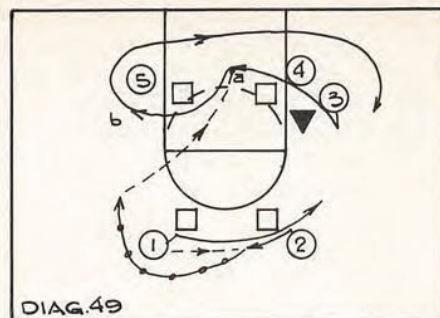


GOTCHA Bags has added a new mini-special bag to its line of quality sports bags. These bags are ideal for the active racquetball enthusiast, to carry gym clothes and shoes, and for any active person who needs a small bag for carrying clothes and equipment. The bags are 10" by 7", are available in gold and blue, and sell for under \$10.00. The handles are of strong nylon webbing and the self-repairing zipper is rust-proof. Gotcha Bags, 424-C Umbarger Rd., San Jose, CA 95111.

THIS self-contained portable starting system eliminates the need for a starting gun and public address system at swim meets or bicycle races. The unit serves as a public address system to call a race and give instructions. A loud beep that starts the race can also call competitors back for a false start. A strobe which flashes simultaneously with the beep enables officials and spectators to start their stopwatches more accurately. The system has a fiberglass case, combination microphone-starter, connections for harness and underwater mounted speakers and built-in charger and meter. King Systems, Inc., P.O. Box 50476, Nashville, TN 37205.

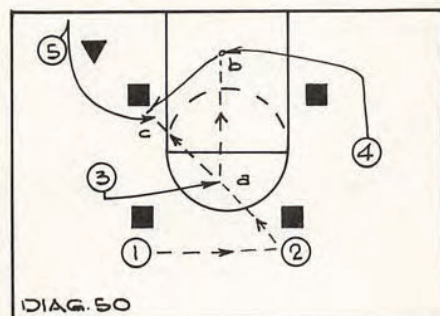


DESIGNED especially for the Mach 1 Module, Marcy's new Hi-Lo Pulley Accessory with padded leather ankle strap makes the Mach 1 a complete home conditioning center. Easily bolted and instantly adjustable, the Hi-Lo Pulley offers dozens of additional sports movements and exercises. Included with every Mach 1 is a specially prepared health fitness booklet that features different exercise programs for men, women and children in various age groups, nutrition guide, charts and coupons. Marcy Fitness Products, 1736 Standard Ave., Glendale, CA 91201.



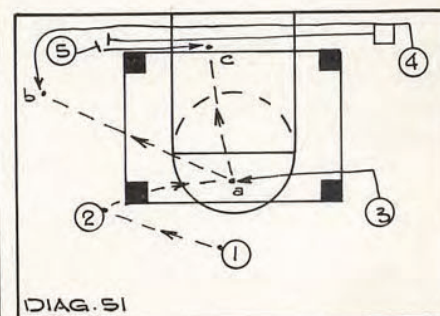
DIAG. 49

In Diagram 50, O5 is being played man-for-man and the other four players aligned as shown. O5 attempts to isolate his opponent in the corner. O1 starts the action with a lateral pass to O2 as the weakside wing player, O3, cuts to the top of the key to take the pass from O2. O3 shoots (a) or feeds O4 cutting underneath (b). If O3 does not have a shot and O4 is not free, O4 continues and screens the left deep defender. O5 then cuts over O4 for a shot or the drive (c). If no play results, O5 aligns on the right while O1 and O2 remain outside and O3 and O4 exchange sides and the play is repeated from the opposite side. If the front line of the zone sags, O1 or O2 will take a set shot from the top of the key.



DIAG. 50

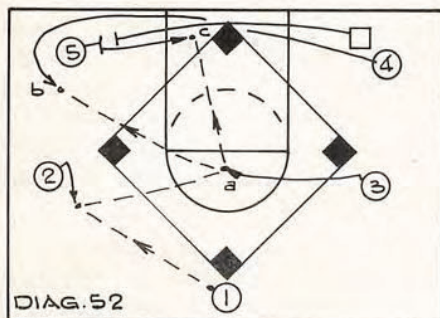
In Diagram 51, the box-and-one is attacked with a 3-2 set. The player being played man-for-man isolates in the right corner. The ball goes from the point player O1 to O2 and the weakside wing, O3, cuts to the free throw line. O2 feeds O3 who shoots if open (a). As O3 meets the ball at the line, O4 circles underneath and rubs his defender off on O5 who sets a lateral pick. O3 can feed O4



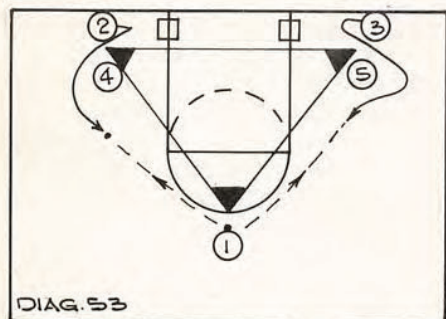
DIAG. 51

for a shot (b) or else dump the ball down to O5 who runs baseline after setting the screen (c).

Diagram 52 shows a 3 out-2 in attack against the diamond-and-one and the alignment and movement of players and ball are identical to the operation shown against the box-and-one. The free throw line area is first attacked and this is followed by moves to free the good shooter, O4, or ultimately O5 underneath.



One team attacked the triangle-and-two with a double stack (Diagram 53). The two players being played man-for-man align on the inside of the double stack arrangement. O4 and O5 are the big players and O1 is an excellent jump shooter who can hit if the triangle sinks. O2 and O3 cut their respective defenders off on the outside men in the stacks. O1 feeds O2 or O3 for shots. After O2 and O3 break for openings, O4 and O5 move high and low for possible openings. If no play results, the stack is set again and the movement is repeated.



In Diagram 54, the operation and alignment is identical to that shown in the previous diagram with one difference: O3 and O2 preface their breaks out of the double stack by crossing underneath the basket prior to meeting the ball. Again O4 and O5 split high and low and O1 is a threat if the triangle sinks.

Another team attacked the triangle-and-two with a 3 out-2 in setup. (Diagram 55). O1 at the point has the ball and he can shoot from the point if the triangle sags. O2 and O4 on the right



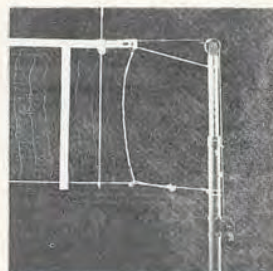
THIS lightweight protective collar is designed to prevent serious injuries caused by errant stick blades, skates, and pucks striking the neck. The collar is inconspicuous and comfortable enough to be worn for the entire length of the game or practice session without restricting head movement. Made of washable nylon ballistic material and ensolite foam, the collar is available in a variety of colors and in junior and senior sizes. Kim Crouch Collar Ltd., 610 Newman Crescent, Whitby, Ontario, L1N 1M6.

THE three-sided Matside scoreboard allows wrestling participants and spectators to see at a glance the scores and time. With the match numbers at the top of the display, tournament spectators can find the matches in which they are interested, and are completely informed of what is happening on each mat as the tournament progresses. Excellent for individual schools as well, the modular design allows the purchaser to start with a basic unit and add to it as the budget permits. The solid state electronic scoreboard rolls right up to the action, so there is no need for installation. Daktronics, Inc., P.O. Box 299, Brookings, S.D. 57006.



A resilient all-weather recreational surface, Rub Kor minimizes body shock and leg fatigue among athletes playing in spikes, flats, or bare feet. A patented formulation of rubber and cork blended with hot asphalt and fine mineral aggregates, the non-slip, non-abrasive surface is unaffected by moisture, heat or cold. Suitable for tracks, tennis courts, field house and paddock floors, it is installed with conventional paving equipment and is essentially maintenance-free. Rub Kor America, Inc., 95 Beaver St., Waltham, MA 02154.

COMpletely free-standing, the Senoh volleyball system eliminates the need for cable supports or a platform support base at the bottom of the upright. It can be set up by one person in five minutes and the net height can be easily adjusted to ten levels without removing the net from the upright. Requires only one floor plate per upright and can be installed in either new or existing gymnasiums. Sports Imports, Inc., P.O. Box 5608, Columbus, OH 43221.



THIS refreezable gel pack greatly increases the effectiveness and range of cold therapy. The Blue-Ice Elastic Wrap measures 52" x 6" and has a large flannel pocket, and one large flex-frozen Blue-Ice gel pack. Cooled in a freezer and inserted into the pocket, the pack gives deep therapy to shoulders, thighs and backs, while the wrap holds the pack in place, providing compression and easy elevation of the injury. Also available with 6 small pockets and 6 gel packs for smaller body areas. Divajex, 15551 Redhill Ave., Tustin, CA 92680.

WEIGHING two-thirds less than heavier, expensive equipment, the "Big Voice" Bullhorn is affordable enough so that each department or activity can have its own unit. This portable system can be used indoors or outdoors and the expert engineering guarantees voice clarity and power. The on-the-job versatility is perfect for coaching, track meets, drill teams and much more. The 6-volt battery operated bullhorn amplifies up to 250 yards. Marketing Industries, P.O. Box 1464, Mission, KS 66222.





INSTADJUST™ is a professionally constructed goal that helps develop the basketball skills of children of all ages.

Bob Lanier

Everyone can play NOW... with the revolutionary INSTADJUST™ Basketball Goal

Available in these models:

Pole Mount Portable	Pole Mount Permanent
Roof Mount	Wall Mount

Also
available in
CONVERSIONS
for existing
backboards.

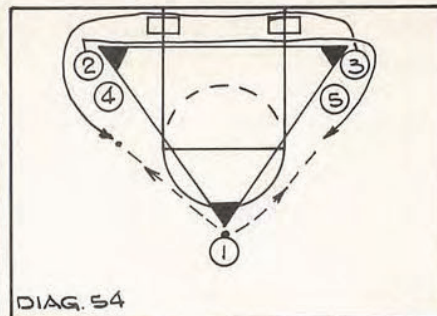
**All
models
adjust to
any height from
regulation 10' down
to 6'... so easily, a child
can reset it in seconds.**

**A must for school gymnasiums and playgrounds.
A natural for YMCAs, YWCAs, health clubs,
resorts and other recreational complexes.
Built to withstand years of heavy use, it's a long
lasting investment for recreational activities.**

Division of AFCO Mfg. Corp.

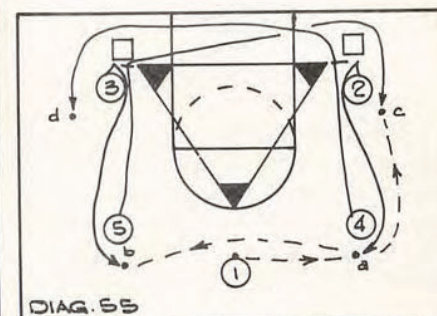
For further information and prices, call or write us today.
Box 230 Dept. AJ Holly, Michigan 48442 (313) 634-4415

... 'child'
engineered
Rondek
Basketball
Equipment



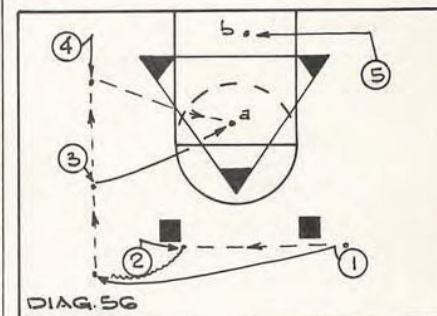
DIAG. 54

side and O3 and O5 on the left side, execute a double exchange longitudinally. O1 feeds O2 as he runs off of O4's pick. O2 can shoot (a) or he can deliver the ball to O3 coming off of O5's pick (b). O2 can optionally await the delayed lateral crossing of O4 and O5 and hit either for shots (c or d).



DIAG. 55

The triangle-and-two (Diagram 56) was attacked with an overload to the left. The two guards, O1 and O2, were being defended man-for-man and the three inside defenders set in a triangular zone. O1 initiates the action with a pass to O2 and then he cuts around O2 to receive a return pass. O3 and O4 are lined up in an overload situation and O5 is low to the weak side. O2 hits O3 on the wing and O3 passes to O4 in the corner. O4 return passes to O3 cutting into the key. O3 takes the shot (a) or dumps the ball down to O5 going baseline to the side of penetration (b).



DIAG. 56

In Diagram 57, the triangle-and-two was attacked with a stack left and an overload left operation. O4 and O5 align in a single stack and O3 isolates away

POSEY FOOTBALL TRAINING AIDS



#101 POSEY COMMUNICATION SYSTEM

Communication between 1 spotter
and 1 coach
2 headphones
2 power pacs (with batteries)
200' of spooled wire
Light-weight durable case

\$229.00



#570 POSEY STANDARD TEAM BAG

At last there are team bags sturdy
enough to carry all your gear. Each is
made of heavy duty, industrial vinyl
polyester fabric with reinforced carry
straps. Large zipper may be locked to
D-ring with any standard lock (not in-
cluded). 27" x 14" x 14".

(Custom sizes available
upon request.)

\$18.00

PLACE YOUR ORDER TODAY

**POSEY
SPORTS EQUIPMENT**

5635 PECK RD. • ARCADIA, CA 91006

TOLL FREE: (800) 423-4292

In California: (213) 443-3143

F1

Aristo STOP WATCHES



No.110

Choose from a complete line
of Pocket and Wrist STOP-
WATCHES, STOP CLOCKS
and CHRONOGRAPHS
FOR ALL SPORTS!

Order from your local dealer.

Send for **ARISTO IMPORT CO., INC.**
Free Catalog 630 Fifth Ave., NYC 10020

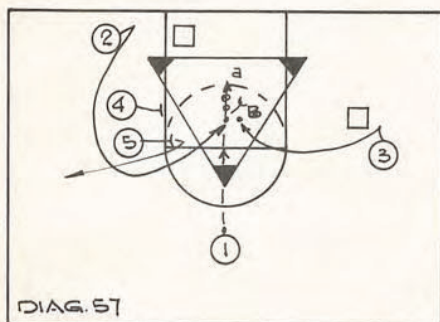
NEW!

Liquid Crystal Display
Electronic Quartz
Split Second Timer

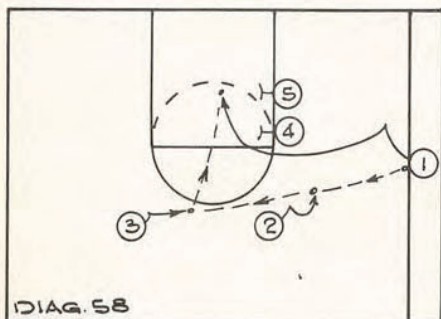
- Reads up to 1hr, 59 min., 59.99 sec.
- Accuracy 0.02 sec/hr.
- Battery life up to 1 yr.

No.111

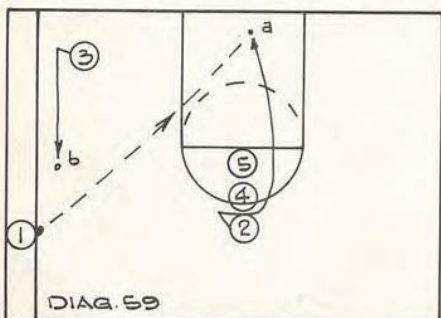
from the stack. O1 has the ball at the point and may shoot if the triangle sags. O1 holds the ball until O2, from his inside left position, cuts his man off circling outside the stack. O2 gets the ball from O1 and drives for the basket (a). If his progress is impeded, O2 pivots and feeds O3 who after delaying, cuts behind O2 for a shot over the top. O5 breaks off to the left wing after O2 has made his cut around the stack and quite frequently was open for a shot.



Our final two plays in this comprehensive review of the past season's basketball offenses are side out-of-bounds maneuvers. In Diagram 58, O4 and O5 set a stack on the right side and O1 in-bounds the ball to O2 who in turn whips the ball to O3. O1 cuts off the stack and O3 feeds O1 for a lay-up underneath.



In Diagram 59, O1 takes the ball out-of-bounds and a three-man stack is formed at the free throw line. O2 starts for the ball and then cuts around O4 and O5 and takes a lob pass from O1 (a). If O2 is not free, O3 retreats and is the safety valve. **AM**



for June, 1978

Game Plan

The first issue of the *Athletic Journal*, 57 years ago this past March, contained the statement: "There should be at this time a medium through which coaches may exchange ideas and students of athletics may receive discussions pertaining to the leading athletic sports."

With somewhere in the neighborhood of 11,000 articles in the intervening 575 issues, the "Journal" has indeed lived up to the statement of its founder. And while it has served as a medium for the exchange of ideas, it has at the same time become a source book for those who would study and record the trends in interschool athletics. The annual review of football offense in the April and May issues with 174 diagrammed plays and the basketball review in this issue are examples of the way trends are covered. Whereas the fullhouse T was the most popular formation in the annual review of 15 years ago, only two plays from this set appeared in this year's coverage of football offense. As the offenses have become more varied, so has it been necessary to increase the number of diagrams and play descriptions. Fifteen years ago the coverage required 38 diagrams and this year the aforementioned 174 — a whopping 4-1/2 times as many. These in-depth coverages partially account for the overwhelming lead in the area of diagrams that *Athletic Journal* enjoys among the other publications in the field. To make it easy for the student of athletics, the June issue each year contains the index for that volume, cross-referenced by title and author.

Add to the *Athletic Journal's* 58 bound volumes, numerous proceedings from the various coaching associations and some 1,500 coaching texts and we feel that we have the most complete source of athletic literature to be found anywhere in this country and possibly in the world, for that matter. For the football student, our oldest texts are by Walter Camp (1896); Fielding Yost (1906); Parke Davis (1911); John Heisman (1921); Bob Zuppke (1922) and Knute Rockne (1925). The oldest basketball text is *Basket Ball*, by Walter Meanwell (1922). Other early basketball texts in our library are *My Basketball Bible*, by Phog Allen (1924), *How to Coach and Play Basketball*, by Craig Ruby (1926), and *Percentage Basketball*, by Bob Hager (1926).

All of this source material is available to anyone and through the years we have had any number of coaches use our athletic library for research projects. Because of the value of the material and due to several unfortunate experiences in the past, the material cannot be taken out of our building. Come in — we'd like to see you.

September Issue

It's customary in this spot to refer to next month's issue. We don't have an issue next month or, for that matter, the month after next. We will be like you, playing golf, going fishing and getting ready for the beginning of school. We'll be back the last week of August so get those pars and fish.

John T. Luff

Winning Soccer

(Continued from page 12)

goal. In Diagram 2, the receiver redirects or turns with the ball on to the defender.

4. Go with it

Rather than a sideline cheer, this phrase indicates to the player screening the ball that the field ahead is wide open and there is no need to even redirect or turn with the pass. The defense is well off the ball and space exists behind the receiver. Turning with the ball takes time and time is always the ally of the defense. *Go with it* allows the offensive player to press on immediately (Diagram 3).

In order to avoid confusion caused by several players providing information simultaneously to the player receiving the ball (for example, one calls *man on* while another calls *turn*), it is wise for the coach to insist that the player who makes the pass be responsible for giving the teammate the information.

5. Jill's ball

Occasionally, two or more players from the same team will move toward a loose ball, either interfering with one another or laying off together, each assuming the other was going to make the play. Through the use of constructive field talk this can be avoided by having the nearest player to the two advancing on the ball call the name of one of the players: *Jill's ball*. The other player might be in a better position to handle the situation, but nevertheless should immediately lay off, and the player whose name is called should continue on. This takes a great deal of maturity on the part of both players going for the ball and the nearby teammate who does the calling. It will, however, avoid confusion and duplication of efforts, not to mention the embarrassment of having the entire defense pulled to one corner of the field all chasing the same ball.

6. Keeper's ball

Some field players may have a hard time merely keeping up with their own responsibilities and might find it difficult or impossible to provide constructive

advice to colleagues through field talk. This is not the case for the goalkeeper: this player must communicate and *keeper's ball*, called loud and long enough for everyone to hear, is the minimum requirement.

Notice that the call *mine or my ball* has been avoided throughout. Referees will not and should not punish talking during the game — it is an integral part of the match — unless it is in an attempt to gain an unfair advantage, or is foul and abusive. Many officials and coaches consider *mine* and *my ball* to be an attempt to confuse the opposition and their use, therefore, is to be minimized or prohibited.

In conclusion, by using the terms defined here and working on the entire aspect of field talking, a coach will find great improvement in the strategic abilities of the players. For an individual player of average skills, smart calling or intelligent reacting to calls may make the difference between starting and riding the bench; and for a team of average physical skills, this technique may be the difference between winning and losing against teams of equal or better physical skills. This process is not easily instituted with players inexperienced in its use. The key is not to rush into implementing the system with older players and to start with the younger players as soon as possible. It is well worth the effort. **AA**

Be Flexible

(Continued from page 33)

them. For such students an instructor must assume a more permissive attitude than he does for players who aspire to bigger things in the game. He must set lower, realistic standards, in both the kind of shots he expects them to make and the type of form he expects them to copy. Using an expert's performance as the model against which their strokes and shots are judged is almost certain to lead to failure and discouragement.

Obviously, an instructor cannot allow for individual differences if he holds to one particular theory or method and tries to apply it to every student. Instead, he must be flexible and adaptable. He must accept each student as a unique personality with his own pattern of readiness, his own potential for learning, and his own degree of commitment to the game. Only by adapting the methods to as many different students as possible will the teaching be effective. **AA**

In each of the two seasons William Davis has served as varsity soccer coach at Virginia Wesleyan, his team won the Dixie Intercollegiate Athletic Conference championship. As an undergraduate, he played soccer at Washington University in St. Louis. Davis is currently on leave from Virginia Wesleyan working on his doctorate at the University of Maryland.

INDEX TO ADVERTISERS

AFCO Mfg. Corp.	60
P.O. Box 230, Holly, MI. 48442	
American Bankers	17
600 Brickell Ave., Miami, FL. 33131	
American Excelsior	53
P.O. Box 5067, Arlington, TX. 76011	
Aristo Import Co.	56
630 Fifth Ave., New York, N.Y. 10020	
Boyle & Co., John	22
112 Duane St., New York, N.Y. 10007	
Dakon Corp.	46
1836 Gilford Ave., New Hyde Park, N.Y. 11040	
Daktronics, Inc.	6
P.O. Box 299, Brookings, S.D. 57006	
Dartmouth Catalogs	22
Suite 68A, Box 263, Hanover, N.H. 03755	
Ducommun Co., M.	60
78 Main St., Warwick, N.Y. 10990	
Hillerich and Bradsby	7
P.O. Box 506, Louisville, KY. 40201	
Hydra-Gym Athletics	5, 47
P.O. Box 599, Belton, TX. 76513	
Isokinetic Co., The	Cover 2
Box 935, Blue Springs, MO. 64015	
Mason City Tent and Awning	56
406 S. Federal Ave., Mason City, IA. 50401	
Master Pitching Machines	45
4200 N.E. Birmingham Rd.,	
Kansas City, MO. 64117	
Medalist Sports Education	Cover 3
735 N. Fifth St., Milwaukee, WI. 53202	
Medalist Standard Steel	56
420 14th St., Three Rivers, MI. 49093	
Mikasa	3
711 W. 17th St., Costa Mesa, CA. 92627	
Mini-Gym, Inc.	36, 37
P.O. Box 266, Independence, MO. 64501	
Mueller Chemical Co.	32, 33
Highway PF, Prairie du Sac, WI. 53578	
National Steelwares, Div. of	
Root-Lowell Mfg. Co.	50
Lowell, MI. 49331	
Nautilus Sports/Medical Ind.	13, 15,
18, 19, 28, 29, 43, 51	
P.O. Box 1783, Deland, FL. 32720	
Nevco Scoreboard Co.	45
215-225 E. Harris Ave., Greenville, IL. 62246	
Nissen Corp.	11
930 27th Ave., S.W.,	
Cedar Rapids, IA. 52404	
Nissen Universal	Cover 4
930 27th Ave. S.W.,	
Cedar Rapids, IA. 52404	
Nocona Athletic Goods Co.	45
Nocona, TX. 76255	
North Carolina Coaches Assn.	
Coaching School	54
Bob Jamieson, Dir.	
3125 W. Friendly Ave.,	
Greensboro, N.C. 27408	
Posey Sports Equipment	49, 60
5635 Peck Rd., Arcadia, CA. 91006	
Putterman & Co., M.	27
2221 W. 43rd St., Chicago, IL. 60609	
Rapid Ribbons	49
P.O. Box 222, Goshen, IN. 46526	
Sportdecals	1
P.O. Box 358, Crystal Lake, IL. 60014	
SportsPlay Prod., Div. of	
PCA Ind., Inc.	49
2298 Grissom Dr., St. Louis, MO. 63141	
Toss Back, Inc.	41
Dorrance, KS. 67634	
Travelrain	22
239 N. Robertson Blvd.,	
Beverly Hills, CA. 90211	
U.S. Sports Academy	57
University of South Alabama,	
307 University Blvd., Mobile, AL. 36688	
University of Nevada, Reno	22
Summer Session, University of Nevada,	
Reno, NV. 89557	
Victor Sports, Inc.	4
5115 S. Millard Ave., Chicago, IL. 60632	
World Sporting Goods, Inc.	57
1306 St. Stephens Rd., Mobile, AL. 36603	
York Barbell Co.	31
P.O. Box 1707, York, PA. 17405	

THE ATHLETIC JOURNAL

Coaches' Ready Reference Service Coupon

On this and the following pages appear the advertisers from September 1977 through June 1978. Many of these companies offer free coaching aids, and free information concerning their products. The listing is being printed at this time so that coaches, athletic directors, and athletic trainers may secure the requested material prior to the start of the new school year. The material will be sent to those actively involved in the coaching or administration of school and college athletic programs. As such, all addresses must be that of the school and not a home address. To secure the desired information, circle the corresponding number on the business reply card and mail.

AFCO

- 7 Information Instadjust Basketball Goal

A1-CHROMA

- 2 Information Tennis Court Surfacing

ALUMINUM ATHLETIC

- 3 Information Astro-Pit Landing Pits
- 4 1978 Brochure

AMERICAN ACADEMY OF

ORTHOPAEDIC SURGEONS

- 5 Text and Workbook on "Emergency Care and Transportation of the Sick and Injured," \$8.50
- 6 Textbook only, \$7.00
- 7 Workbook only, \$2.00
- 8 Answer Book, \$2.00

AMERICAN BANKERS

- 9 Information on Supplementing Income During Off-Seasons

AMERICAN EXCELSIOR

- 10 Free Complete Brochure

AMERICAN LOCK CO.

- 11 Information on Padlocks for Gymnasium Lockers

AMERICAN SPORTS

EDUCATION INSTITUTE

- 12 Information on Budgeting Programs

AMF-AMERICAN ATHLETIC

- 13 Information Gymnastics Equipment
- 14 Information Gymnastics Programs

AMF-VOIT

- 15 Information on Complete Line of Athletic Balls

ANK-L-AID

- 16 Brochure on Ankle Supports

ARISTO IMPORT CO.

- 17 Catalog on Sop Watches for Every Sport

ATHLETIC FABRIC

- 18 Information Athletic Uniforms

ATHLETIC INSTITUTE

- 19 Order Forms and Information on Coaching Guides

ATHLETIC MOTIVATION

CENTER

- 20 Information on Leadership in Athletics

B & G EQUIPMENT

- 21 Information Actiondrink 400
- 22 Information 7 Gallon Line Marker
- 23 Information Field Marking Paint
- 24 Information Portable Water Fountain
- 25 Information Field Marker
- 26 Information Gunga Din Water Fountain
- 27 Information Control Dispenser and Purge
- 28 Information Yard Line Marker
- 29 Information Goal Line Marker
- 30 Information Equipment Bag

BELCO

- 31 Information Athletic Laundry System

BELL FOUNDRY

- 32 Information Exercise Equipment

BOYLE & CO. JOHN

- 33 Information Pro-Tec Field and Gym Floor Covers
- 34 Information Divider Curtains

BRUCE BOYS MFG. CO.

- 35 Information Baseball Pitching Machine

BUTWIN SPORTSWEAR

- 36 Free Catalog

CAPITAL INDUSTRIES

- 37 Catalog on Red Fox Uniforms

CARRON NET CO.

- 38 Information Basketball Nets

- 39 Information Volleyball Nets

CHAMPION PRODUCTS

- 40 Catalog on Athletic Uniforms

CHICAGO ROLLER SKATE

- 41 Information on Roller Skating as a Coed Activity

COLLINGWOOD FUND

RAISING

- 42 Free Catalog

CONVERSE RUBBER CO.

- 43 Information Athletic Shoes

CREATIVE BOOK CO.

- 44 Free Catalog

CRONUS PRECISION PROD.

- 45 Free Color Catalog
- 46 Name of Nearest Dealer

- 47 Information Digital Electronic Stopwatches

CURLEY-BATES CO.

- 48 Information Easton B5 Pro Aluminum Bats

CURRY ACTUAL-GRAM

- 49 Information Instant Plotter Coaching Aids

- 50 Free Catalog on Desk Pads

- 51 Information Football Visual Aids

- 52 Information Basketball Visual Aids

- 53 Information Baseball Visual Aids

DAKON CORP.

- 54 Information Rollabout Whirlpool Bath

- 55 Information Electric Ball Inflators

- 56 Information Bat Cart

- 57 Information Relay Batons

- 58 Information Portable Ballrack

- 59 Information Soccer Sideline Markers

- 60 Information Equipment Hanger

DAKTRONICS, INC.

- 61 Free Literature on Complete Line of Solid State Scoreboards

DARIC SCOREBOARDS

- 62 Information Ultimatic 10 Scoreboard

- 63 Free Catalog

DARTMOUTH CATALOGS

- 64 Information "Directory of Football Defenses"

DIMCO-GRAY CO.

- 65 Information Official's Sports Timers

DJ DESIGNS

- 66 Information Sketch-A-Play

DOUGLAS INDUSTRIES

- 67 Complete Information on Tennis Nets and Accessories

DRACKETT CO.

- 68 Information Nutriment Energy Food

DUCOMMUN CO. M.

- 69 Free Catalog on Stop Watches

EASTMAN KODAK CO.

- 70 Information Kodak Super 8 Sports Analysis Products

EDUCATIONAL MATERIALS

- 71 Free Catalog on Athletic Directors' Aids

ELECTRO-MECH

- 72 Complete Catalog on Scoreboards for All Sports

EMERSON BOOKS

- 73 Information on "Gymnastics; Progressive Practice and Modern Coaching"

E-Z MARK PLAYMAKER

- 74 Information Playmaker Sheets

FAIR-PLAY SCOREBOARD

- 75 Free Colorful Catalog
- 76 Information Football Scoreboards

- 77 Information Shot Timers

FIBER SPORT

- 78 Information Fibersport V-3000

FRANKLIN LIFE INSURANCE

- 79 Information on Extra Summer Income or a Full-Time Career

GANSLEN, RICHARD V.

- 80 "Mechanics of the Pole Vault," \$5.00 per Copy

GENERAL BANDAGE

- 81 Information Guard-Tex Self-Adhering Tape

GEORGIA MARBLE

- 82 Information Plus 5 Field Marker

GILL, HARRY

- 83 Free Catalog on Track and Field Equipment

GOLD MEDAL PRODUCTS

- 84 Free Catalog & Booklet "How to Make Money with Snacks"

GRID SPORTS

- 85 Complete Catalog
- 86 Information on Skid-Neez

HADAR ATHLETIC CO.

- 87 Free Catalog

HEUER TIME & ELECTRONICS

- 88 Information Heuer LCD Microsplit Stopwatch

HILLERICH & BRADSBY

- 89 Information Louisville Slugger Bats

- 90 Information Aluminum Bats

HYDRA-GYM ATHLETICS

- 91 Brochures on Powernetic Equipment

IDAHO STATE UNIVERSITY

- 92 Brochure on Graduate Work

INSTITUTE OF COMPARATIVE

PHYSICAL EDUCATION

- 93 Information on Study-Tour Courses

ISOKINETIC CO. THE

- 94 Information Exercise Equipment

J & J ENTERPRISES

- 95 Information on Bench Warmers

JENKINS HOT SEAT

- 96 Information

JUGS, DIV. OF

JO PAUL IND.

- 97 Information JUGS Pitching Machines

- 98 Information Combination Pitching Machine

KAISER ALUMINUM

- 99 Information KAL-100 Seating System

- 100 Information on Replacement Seating

KELLEY ATHLETIC, BILL

- 101 Information on Complete Line of Protective Equipment

K-LIN SPECIALTIES

- 102 Information Fireball Baseball Pitching Machine

- 103 Information Silent Partner Tennis Machine

- 104 Information Wheels II Portable Pitching Machine

KORNEY BOARD AIDS

- 105 Catalog on Training Aids

- 106 Catalog on Basketball Specialties

- 107 Information One-on-One Shooting Mate

KWIK KARE PROD.

- 108 Information Kwik-Kold
- 109 Information "Techniques of Taping"

- 110 Information Topi-Stat Spray-On Bandage

- 111 Information Kwik-Cut Tape Cutter

- 112 Information Kwik-Kold Instant Ice Pack

- 113 Information Kwik-Gesic Heat Balm

- 114 Information Kwik-Grip

- 115 Free Catalog

LEVITT, BUNNY

- 116 "Basketball Players Digest," \$3.50

LIFELINE PRODUCTION & MARKETING

- 117 Information "The Bobby Hinds Lifeline" Jump Rope

- 118 Information "The Bobby Hinds Lifeline" Gym

MANDELKER'S

- 119 Free Catalog

MAPLE FLOORING MFG.

- 120 Maple Floor Maintenance Guide

- 121 Game Markings Manual

- 122 Sweet's Catalog

- 123 Spec/Data

- 124 Information on Performance Floors

MARCY GYM EQUIP.

- 125 Free Marcy Motivational Program

- 126 Free Catalog on Physical Fitness Products

MASON CITY TENT

AND AWNING

- 127 Information Rip Flag Belt and Flat Set

- 128 Information Duffel Bags

MASTER PITCHING

MACHINES

- 129 Information Baseball and Softball Pitching Machines

MASUEN CO. A.J.

- 130 Free Illustrated Catalog

MARTHUR TOWELS

- 131 Free Catalog on Quality School Products

McCALL'S REBOUNDER, DIV. OF SORENSON CHRISTIAN

- 132 Information McCall's Rebounder

MEDALIST DORO

- 133 Information Timers

MEDALIST GLADIATOR

- 134 Information Arm and Hand Pads

- 135 Information Ernie Banks Baseball Gloves

MEDALIST-SAND KNIT

- 136 Free Catalog Athletic Uniforms

- 137 Information Wrestling Uniforms

- 138 Information Baseball Uniforms

139 Information Football Uniforms
 140 Information Basketball Uniforms
MEDALIST SPORTS EDUCATION
 141 Information on Camp Program
 142 Information Cassette Tapes
 143 Information Hubie Brown Film
 144 Information on Leadership in Athletics
MEDALIST STANDARD STEEL
 145 Information on Bleachers
MIKASA
 146 Information Rubber Balls
MINI-GYM
 147 Information Exercise Equipment
MOORE, BILLY
 148 "Winning in Youth Baseball," \$3.95 Per Copy
MUELLER CHEMICAL
 149 Information Quench Gum
 150 Information Complete Line of Products for Wrestlers
 151 Information and Free Sample M-Untape
NASCO, INC.
 152 Information on Fund Raising
NATIONAL DAIRY COUNCIL
 153 Free Copy of "The Role of Dairy Food in the Diet"
 154 Free Copy of "Nutrition and Athletic Performance"
NATIONAL STEELWARES
 155 Information Line Markers
 156 Information Electric Inflators
NAUTILUS SPORTS/MEDICAL
 157 Information Exercise Equipment and Training Program
NEBRASKA COACHING SCHOOL
 158 Information
NEFF ATHLETIC LETTERING CO.
 159 Free 45-Page Catalog
NEVCO SCOREBOARD CO.
 160 AJ-6 Scoreboards, UL Tested, Solid State
NEW ITEMS (additional information)
 161 Capital Ind. — Information Lady Fox Uniforms
 162 Daktronics — Information Matside Scoreboard
 163 Divijex — Information Blue Ice Elastic Wraps
 164 Gotcha Bags — Information Sports Bags
 165 Kim Crouch — Information Protective Collar
 166 King Systems — Information Portable Starting System
 167 Marcy — Information Hi-Lo Pulley
 168 Marketing Industries — Information Mini-Bullhorn
 169 Mini-Gym — Information on the "Grappler"
 170 Rub-Kor — Information on Recreational Surfaces
 171 Sports Imports — Information Senoh Volleyball System
NISSEN CORPORATION
 172 Free Catalog
 173 Information Mat Side Timer/Scoreboard
NISSEN UNIVERSAL
 174 Free Catalog
 175 Information 16-Station Gladiator

176 Information 16-Station Centurion
 177 Information Real-Runner
 178 Information Bio-Mechanical Research
 179 Information on Upgrading Present Equipment
 180 Information on Fund Raising Program
NOCONA
 181 Information Football Protective Equipment
 182 Information Baseball Protective Equipment
 183 Free Catalogs
NORTH CAROLINA COACHING SCH.
 184 Information
OCEAN POOL SUPPLY CO.
 185 Free Catalog
OWL BIOMEDICAL
 186 Information Exerpac Heart Rate Indicator
PARAMOUNT HEALTH EQUIP.
 187 Catalog on Exercise Equipment
PARKER PUBLISHING
 188 Information on "The Option Offense for Winning Basketball"
PATWIN CO.
 189 Information on Spinal Transfer Board
PHYSICIANS & NURSES MFG. CORP.
 190 Information Kold-Kompress
 191 Information Hot-Kompress
PORTAPIT/CATA-POLE
 192 Information on the Cata-Pole
PORTER EQUIP. CO.
 193 Free Gymnastics Equipment Catalog
PORTRAIT PUBLICATIONS
 194 Information on "How to Create Team Spirit"
POSEY SPORTS EQUIPMENT
 195 Information # 101 Communication System
 196 Information # 570 Standard Team Bag
 197 Free Catalog of Decals
 198 Brochure on Blocking Chutes
 199 Information Posey Air Horn
 200 Information Flag Belts
 201 Information Web Belts
 202 Information Posey Dribble Aids
POWERS MANUFACTURING CO.
 203 Catalog on Athletic Wear
PROGRESSIVE BOWLING DEVELOPMENT
 204 "Par Bowling" \$3.95 Per Copy Plus 40 Cents Handling and Postage
PROFESSIONAL GYM
 205 Free Literature on Complete Line
PRO-PIT
 206 Free Color Catalog
PUTTERMAN & CO.
 207 Information Outdoor Windscreens
 208 Information Indoor Curtains
 209 Information Court Divider Nets
 210 Information Bumper Pads
 211 Information Gym Floor Covers
 212 Information Gym Divider Curtains
 213 Information Gym Wall Pads
 214 Information Athletic Field Covers
 215 Information Edwards Nets and Posts

RAPID RIBBON
 216 Complete Information Athletic Awards
RAWLINGS
 217 Information Football Equipment
 218 Information Basketball Equipment
 219 Information Hockey Equipment
 220 Information R5 Football
RIDDELL
 221 Information on Football Helmets
ROCKFORD TEXTILE MILLS
 222 Information Wick-Dry Athletic Socks
ROGERS ATHLETIC
 223 Information Mod Sled
 224 Free Catalog
ROYAL TEXTILE MILLS
 225 Information on the Duke
RUSSELL CORP.
 226 Catalog on Athletic Wear
SCHERING CORPORATION
 227 Information Tinactin — Athletic Cream and Powder for Athlete's Foot
SCHOLASTIC RESOURCES UNLIMITED
 228 "The Athletic Director," \$4.95 Per Copy
SCHOOL-AID CO.
 229 Full Athletic Book Catalog
SCHOOL CALENDAR CO.
 230 Information on Free Athletic Calendars
SCHOOL HEATH SUPPLY
 231 Free Coach & Trainer Catalog
SCIENCE RESEARCH ASSOC.
 232 Complete Program, \$6.50 Per Athlete
 233 Sample Inventory, \$7.50
SEAMCO
 234 Information on Complete Line of Inflated Balls
SEARS ROEBUCK & CO.
 235 Information "The Winner" Basketball Shoes
SERON MANUFACTURING
 236 Information Eyeglass Holder
 237 Information Metal Whistles
 238 Information Whistle-Holder
 239 Information Whistle Lanyards
SILICONIX
 240 Information on Electronic Digital Stop Watches
SMI SPORTS
 241 Free Booklet "Personal Motivation"
SOUTHERN ATHLETIC
 242 Information on Bike II Helmet System
 243 Information on Complete Line of Practice Clothing
 244 Color Catalog
SPANJIAN
 245 Free Catalog Athletic Uniforms
SPORTDECALS
 246 Free Catalog
SPORTING GOODS MANUFACTURERS ASSOC.
 247 "The Naked Truth About Sports and the Law"
SPORTS EQUIPMENT
 248 Information Curvemaster Pitching Machine
SPORTS INCORPORATED
 249 Information Sport-Ace Whistle
SPORTS/PLAY PROD.
 250 Free Catalogs on Athletic and Phys. Ed. Products, Playground and Above-Ground Swimming Pools

SPORTS TIGERS
 251 Information on the Game of Hockey
STEDMAN CORP.
 252 Information Quality Clothing Products
STOKLEY-VAN CAMP
 253 Information Gatorade
TENNESSEE EXERCISE EQUIP. CO.
 254 Information on Complete Line of Weight Lifting/Training Equipment
TENNIS COURT AND TRACK BUILDERS ASSN.
 255 Free Copies Guide Specifications
THERMO-FLEX
 256 Information Cloud 9+ Air Cushion
TIGER SPORTS SHOES, DIV. OF ASICS SPORTS OF AMERICA, INC.
 257 Free Catalog
TIP-O-MATIC
 258 Information Basketball Rebounder
TOSS BACK
 259 Information Basketball Toss Back Models
 260 Information Baseball Toss Back Models
TOTES, INC.
 261 Information Totes SuperGrip
TRAC
 262 Information Track Curb Markers
TRAVELRAIN
 263 Information on Automatic Power Sprinkler for Athletic Fields
TUF-WEAR
 264 Information W.T.K. Protectors
U.S. SPORTS ACADEMY
 265 Information on Summer Courses
U.S. VOLLEYBALL ASSN. PUBLICATIONS
 266 Information Complete Volleyball Library
UNIVERSITY OF NEVADA, RENO
 267 Information on Coaching Clinic
VELVA SHEEN
 268 Free Catalog
VICTOR SPORTS
 See Coupon on Page 4
WORLD SPORTING GOODS
 269 Free Color Catalog on Training Equipment
WORTH SPORTS
 270 Information Horsehide Balls
 271 Information on 4 Horsemen Line of Baseballs
 272 Information Thumper Bats
 273 Information College 12-Pack of Aluminum Bats
 274 Free Catalog
YORK ARCHERY
 275 Complete Information on Bows, Arrows, and Accessories
YORK BARBELL CO.
 276 Information Basic All-in-One Home Gym Bench
 277 Information Multi-Purpose Bench
 278 Information WW Portable Isometric Rack
 279 Information Adjustable Squat Stands
 280 Information Food Supplements
 281 Information Olympic-International Bumper Plates
 282 Free Catalog

JUNE (Expires August 31)

CIRCLE NUMBERS FOR INFORMATION

1	2	3	4	5	6	7	8	9	10	11	12	13	14
15	16	17	18	19	20	21	22	23	24	25	26	27	28
29	30	31	32	33	34	35	36	37	38	39	40	41	42
43	44	45	46	47	48	49	50	51	52	53	54	55	56
57	58	59	60	61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80	81	82	83	84
85	86	87	88	89	90	91	92	93	94	95	96	97	98
99	100	101	102	103	104	105	106	107	108	109	110	111	112
113	114	115	116	117	118	119	120	121	122	123	124	125	126
127	128	129	130	131	132	133	134	135	136	137	138	139	140
141	142	143	144	145	146	147	148	149	150	151	152	153	154
155	156	157	158	159	160	161	162	163	164	165	166	167	168
169	170	171	172	173	174	175	176	177	178	179	180	181	182
183	184	185	186	187	188	189	190	191	192	193	194	195	196
197	198	199	200	201	202	203	204	205	206	207	208	209	210
211	212	213	214	215	216	217	218	219	220	221	222	223	224
225	226	227	228	229	230	231	232	233	234	235	236	237	238
239	240	241	242	243	244	245	246	247	248	249	250	251	252
253	254	255	256	257	258	259	260	261	262	263	264	265	266
267	268	269	270	271	272	273	274	275	276	277	278	279	280
281	282												

FOR MORE INFORMATION, CATALOGS AND BROCHURES circle the advertiser's number as shown on the preceding pages and mail. No postage is needed in the United States.

All information called for on the card must be supplied. Material will be sent to a school address only.

NAME

- ☐ Athletic Director
☐ Head Coach
☐ Asst. Coach
- ☐ Athletic Trainer
☐ Intramural Director
☐ Phys. Ed. Instructor

SCHOOL

STREET ADDRESS
OF SCHOOL

CITY

STATE

ZIP

PLEASE PRINT

SPORTS (Check applicable squares for those you work with)

- ☐ Baseball; ☐ Football; ☐ Tennis; ☐ Swimming; ☐ Basketball; ☐ Gymnastics; ☐ Track; ☐ Wrestling; ☐ Cross-Country; ☐ Hockey; ☐ Soccer; ☐ Other

SCHOOL ENROLLMENT

Type of School ☐ College ☐ High School ☐ Jr. High School ☐ Elementary

NOTE: All of the above information must be furnished or inquiries will not be forwarded. Material will be sent only to school address and not to home address.

*Request for additional information
about the products advertised and dis-
cussed on this issue.*

Page 66 June Issue

BUSINESS REPLY MAIL

No Postage Stamp Necessary If Mailed in the United States

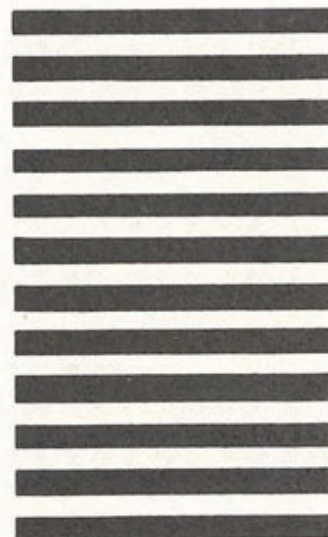
ATHLETIC JOURNAL

1719 HOWARD STREET

EVANSTON, ILLINOIS

60202

FIRST CLASS
PERMIT NO. 41
EVANSTON, ILL.



Medalist Sports Education

presents

HUBIE BROWN'S 16mm Sound Film

"TEN BACK TO THE BASKET MOVES"

produced by **Nautilus** SPORTS/MEDICAL INDUSTRIES
featuring ten skill-building drills for twenty minutes of each day.

This unique film captures the secret drilling techniques of one of America's finest clinicians personally demonstrating "ten back to the basket moves" from three post positions. Coaches and players will benefit from Hubie's clear cut single-concept demonstrations:

1. Hook shot in the lane.
2. Challenging defensive man in lane with hook shot.
3. Base line pivot, jump shot - crossover option, lane pivot, jump shot, crossover option.
4. Foul lane area, pivot, jump shot, drive, crossover series.
5. Missed shot - rebound pivot - hook shot in lane.
6. Vertical move - pump fake.
7. Horizontal move - hook shot.
8. Vertical move - defense into horizontal.
9. The horizontal move - defense into the vertical.
10. Quickness and location.

"THIS FILM WILL HELP YOU TO IMPROVE YOUR PLAYERS' OFFENSIVE SCORING POTENTIAL THROUGH COURT AWARENESS AND REPETITION OF DRILLS."

Hubie Brown

... Atlanta Hawks

"The best instructional film on basketball I have ever seen..."
—Jerry Pimm, Utah University

"IMPROVES OFFENSIVE SKILLS ... DYNAMITE" —Al McGuire

"NO SPORTS CURRICULUM FILM LIBRARY COMPLETE WITHOUT IT"

—Jack Ramsay (Portland Trailblazers)

"ADVANCED VISUAL CONCEPTS

... ESSENTIAL" —John Wooden

(UCLA, retired)

"TRADE SECRETS ... A

MUST" —Chuck Daly (Penn)

"SUPER JOB COVERING POST PLAY"

—C.M. Newton (Alabama)

"SPORTS-ATHLETIC FILM CURRICULUMS QUALIFY FOR 100% FUNDING UNDER

TITLE 4b" —Mary Helen Mahar,

U.S. Office of Education

(Elem., Jr. H.S. & High Schools only)

IMMEDIATELY AVAILABLE!

Order the very best moves in basketball today for only \$190.00!

Call toll-free WATS 800-558-9858
NOW!

Confirming School P.O. _____

Name _____

School Address _____

City _____

State _____ Zip _____

Telephone _____

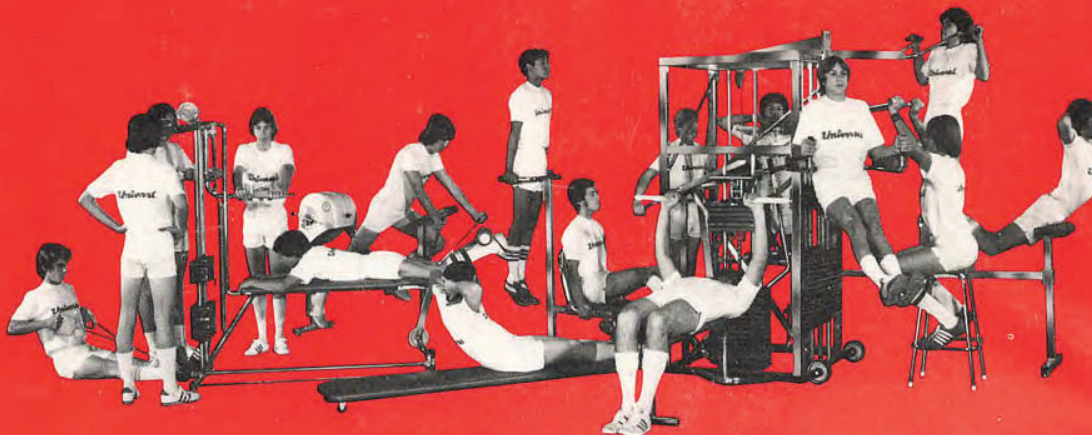
Home Address _____

City _____

State _____ Zip _____

Make checks payable to: Medalist Sports Education, — Library, P.O. Box 95694, Chicago, IL 60690

Call free WATS line for **Premiere Gift Certificate** worth cash towards purchase of this sensational film . . . Limited Offer!!!



Universal Joins Nissen

Universal, the world's largest manufacturer of physical conditioning systems, has merged with The Nissen Corporation. As of April 1, 1978, Nissen will manufacture the complete line of Universal equipment in its Cedar Rapids, Iowa, plant.

Complete stock of parts at regional offices

We are stocking a complete inventory of Universal parts and machines in each of our regional offices. Nissen Universal Representatives, qualified to install and service the entire Universal line, are on call to serve you. So if you ever have a problem, you won't be far from the solution.

Call 800-553-7901

If you have a problem with any Universal equipment you now have, we want to know about it — fast. Call us TOLL-FREE today and we'll make arrangements for prompt service.

You can use our TOLL-FREE number to get information on the full line of Universal Gym Machines. We'll send you our catalog and have our Regional Representative explain Nissen Universal's exclusive Dynamic Variable Resistance Exercise System. He'll also be glad to arrange a demonstration at your convenience.

Send For More Information!



Please send me details on:

- | | |
|---|--|
| ☐ The 16-Station GLADIATOR | ☐ UPGRADING my present equipment |
| ☐ The NEW 16-Station CENTURION (Variable Resistance) | ☐ Nissen-Universal's NO-COST-TO-SCHOOL Fund Raising Program |
| ☐ The REAL-RUNNER | |
| ☐ The MAXIMUS Series | |
| ☐ BIO-MECHANICAL RESEARCH information | |

_____ YES, we want a demonstration. Please have a representative call on us.

_____ Phone _____ Best time(s) _____

Send information to:

Name _____

Title _____

School _____

Address _____

City _____ State _____ Zip _____

Comments: _____

Mail this card to:
Nissen Universal P.O. Box 1270 Cedar Rapids, Iowa 52406